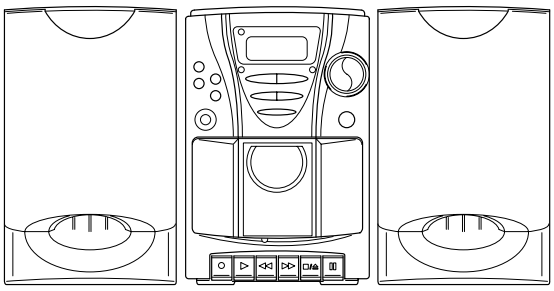
aiwa
SERVICE

LCX-108

EZ(S) EZ(L)

K(S) HS(S)

HRJ(S)



SERVICE MANUAL

COMPACT DISC STEREO SYSTEM

BASIC TAPE MECHANISM : ZZM-1AR3NC
BASIC CD MECHANISM : DA11T3C

aiwa

S/M Code No. 09-00A-350-1N1

DATA

SPECIFICATIONS

HR MODEL

Tuner
FM

Tuning range	87.5 - 108.0 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

AM

Tuning range	531/530 - 1,602/1,710 kHz (9/10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

Tape deck

Track format	4 tracks, 2 channels
Frequency response	Normal tape: 50 - 12,500 Hz (EIAJ)
Recording system	AC bias
Erasing system	Magnet erase
Heads	Recording/playback head (1) Erasure head (1)

CD player

Wow and flutter	Unmeasurable
Scanning method	Non-contact optical scanner (semiconductor laser)

Amplifier

Power output	1.9 W + 1.9 W (7 ohms, T.H.D. 1%, 1 kHz) 2.5 W + 2.5 W (7 ohms, T.H.D. 10%, 1 kHz)
Input	AUX (400 mV)
Output	SPEAKERS: 7 ohms or more PHONES: Stereo mini-jack

General (Main unit)

Power requirements	110 - 120/220 - 240 V AC, switchable, 50/60 Hz
Power consumption	20 W
Dimensions (W x H x D)	146 x 216 x 206 mm
Weight	2.1 kg

Speaker

Speakers	100 mm cone type, 7 ohms
Dimensions (W x H x D)	130 x 214 x 191 mm
Weight	0.85 kg

- Design and specifications are subject to change without notice.

K, EZ, HS MODELS

Tuner
FM

Tuning range	87.5 - 108.0 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

MW

Tuning range	531/530 - 1,602/1,710 kHz (9/10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW

Tuning range	144 - 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Tape deck

Track format	4 tracks, 2 channels
Frequency response	Normal tape: 50 - 12,500 Hz (EIAJ)
Recording system	AC bias
Erasing system	Magnet erase
Heads	Recording/playback head (1) Erasure head (1)

CD player

Wow and flutter	Unmeasurable
Scanning method	Non-contact optical scanner (semiconductor laser)

Amplifier

Power output	1.9 W + 1.9 W (7 ohms, T.H.D. 1%, 1 kHz/DIN45500) 2.5 W + 2.5 W (7 ohms, T.H.D. 10%, 1 kHz/DIN45324) 6.0 W + 6.0 W (DIN MUSIC POWER)
Input	AUX (400 mV)
Output	SPEAKERS: 7 ohms or more PHONES: Stereo mini-jack

General (Main unit)

Power requirements	AC 220 V, 60 Hz (HS MODEL) AC 230 V, 60 Hz (K, EZ MODELS)
Power consumption	20 W
Dimensions (W x H x D)	146 x 216 x 206 mm
Weight	2.1 kg

Speaker

Speakers	100 mm cone type, 7 ohms
Dimensions (W x H x D)	130 x 214 x 191 mm
Weight	0.85 kg

- Design and specifications are subject to change without notice.

ACCESSORIES/PACKAGE LIST

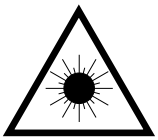
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CLD-906-010		IB,EZ(9L)FM<EZS,EZL>
1	8A-CLD-901-010		IB,H(ECA)FM<HRS>
1	8A-CLD-905-010		IB,K(E)FM<KS>
2	87-A90-030-010		ANT,LOOP AM-NC C
3	87-A90-118-010		ANT,WIRE FM (Z)<EXCEPT HRS>
3	87-A90-064-010		FEEDER-ANT,FM(SHS)<HRS>
⚠ 4	87-099-726-010		PLUG,ADPTR CONV(K)<KS>
⚠ 4	87-A91-017-010		PLUG,CONVERSION JT-0476<HRS>
5	8A-CLB-961-010		RC UNIT,RC-AAT11

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

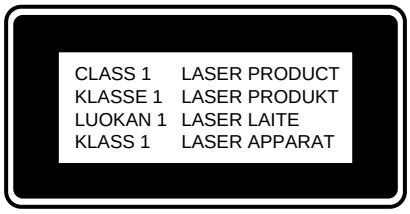
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

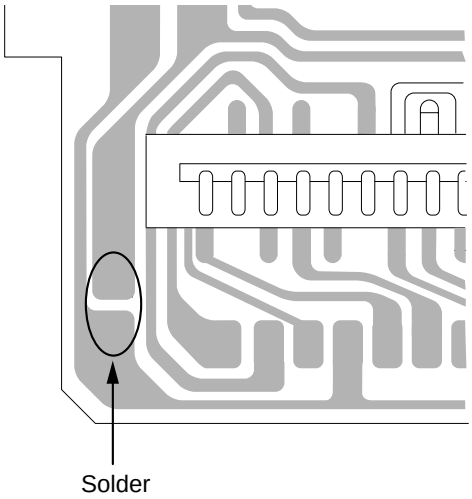


Precaution to replace Optical block (SF-P101NR)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



ELECTRICAL MAIN PARTS LIST

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-064-010		IC,LA4227
	87-A21-443-040		C-IC,M62495AFP
	87-A20-446-010		C-IC,LA9241ML
	87-A20-459-010		C-IC,LC78622ED
	87-A21-093-010		IC,LA6541D
	87-A21-431-010		IC,BA4560N
	8A-CLD-630-010		C-IC,LC867132V-5S27
	87-A20-650-010		IC,RPM6938-V11
	87-070-127-110		IC,LC72131 D
	87-A20-913-010		IC,LA1837NL
TRANSISTOR			
	89-318-154-080		TR,2SC1815 (0.4W)
	87-026-463-080		TR,2SA933S (0.3W)
	89-112-965-080		TR,2SA1296 (0.75W)
	87-026-291-080		TR,DTC124XS
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-462-080		TR,2SC1740 S(RS 0.3W)
	87-026-215-080		TR,DTC114YS
	87-026-290-080		TR,DTA124X
	89-109-332-380		TR,2SA933RS
	89-113-187-080		TR,2SA1318TU
	87-026-239-080		TR,DTC114TK (0.2W)
	87-026-213-080		CHIP-TR,DTC114YK
	87-026-464-080		TR,DTC114TS (0.3W)
	87-A30-072-080		C-TR,RT1P 144C
	89-327-143-080		TR,2SC2714 (0.1W)
	89-505-434-540		C-FET,2SK543(4/5)<EXCEPT HRS>
	87-A30-086-070		C-TR,CSD1306E<EXCEPT HRS>
	87-A30-074-080		C-TR,RT1P 141C<EXCEPT HRS>
DIODE			
	87-070-345-080		DIODE,IN4148
	87-017-978-080		DIODE,1N4003
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-345-080		ZENER,MTZJ10C
	87-A40-648-080		ZENER,MTZJ8.2A
	87-027-702-080		DIODE,ZENER HZ6C2L (200MA)
	87-A40-234-080		ZENER,MTZJ5.6A
	87-017-149-080		ZENER,HZS6A2L
	87-A40-465-010		DIODE,FR202
	87-A40-442-080		ZENER,MTZJ9.1A
	87-A40-498-080		ZENER,MTZJ24B<HRS>
	87-A40-270-080		C-DIODE,MC2838<EXCEPT HRS>
MAIN C.B			
C211	87-010-401-080		CAP, ELECT 1-50V
C212	87-010-401-080		CAP, ELECT 1-50V
C237	87-010-371-080		CAP, ELECT 470-6.3V
C239	87-010-401-080		CAP, ELECT 1-50V
C240	87-010-401-080		CAP, ELECT 1-50V
C247	87-010-401-080		CAP, ELECT 1-50V
C248	87-010-401-080		CAP, ELECT 1-50V
C251	87-010-404-080		CAP, ELECT 4.7-50V
C257	87-010-401-080		CAP, ELECT 1-50V
C258	87-010-401-080		CAP, ELECT 1-50V
C261	87-010-401-080		CAP, ELECT 1-50V
C262	87-010-401-080		CAP, ELECT 1-50V
C263	87-012-286-080		CAP, U 0.01-25<KS,EZS,EZL>
C263	87-012-274-080		CHIP CAP,U 1000P-50B<HRS,HSS>
C264	87-012-286-080		CAP, U 0.01-25<KS,EZS,EZL>
C264	87-012-274-080		CHIP CAP,U 1000P-50B<HRS,HSS>
C265	87-010-263-080		CAP, ELECT 100-10V
C266	87-010-263-080		CAP, ELECT 100-10V
C267	87-010-112-080		CAP, ELECT 100-16V
C268	87-010-112-080		CAP, ELECT 100-16V
C271	87-010-221-080		CAP, ELECT 470-10V
C272	87-010-221-080		CAP, ELECT 470-10V
C278	87-010-405-080		CAP, ELECT 10-50V
C279	87-010-385-080		CAP, ELECT 220-25V
C280	87-010-196-080		CHIP CAPACITOR,0.1-25
C281	87-010-196-080		CHIP CAPACITOR,0.1-25
C291	87-012-286-080		CAP, U 0.01-25
C292	87-012-286-080		CAP, U 0.01-25<HRS,HSS>
C292	87-018-134-080		CAPACITOR,TC-U 0.01-16<KS,EZS,EZL>
C293	87-012-286-080		CAP, U 0.01-25
C294	87-012-286-080		CAP, U 0.01-25
C295	87-018-127-080		CAP, CER 470P-50V<KS,EZS,EZL>
C296	87-018-127-080		CAP, CER 470P-50V<KS,EZS,EZL>
C297	87-A11-154-080		CAP,TC U 4700P-16 Z F<KS,EZS,EZL>
C298	87-A11-154-080		CAP,TC U 4700P-16 Z F<KS,EZS,EZL>
C301	87-016-495-000		CAP,E 3300-25 M SMG
C306	87-010-404-080		CAP, ELECT 4.7-50V
C307	87-010-401-080		CAP, ELECT 1-50V
C308	87-010-221-080		CAP, ELECT 470-10V
C310	87-010-248-080		CAP, ELECT 220-10V
C311	87-010-263-080		CAP, ELECT 100-10V
C312	87-010-385-080		CAP, ELECT 220-25V
C316	87-010-263-080		CAP, ELECT 100-10V
C317	87-A11-145-080		CAP,TC U 0.01-50 Z F
C331	87-010-401-080		CAP, ELECT 1-50V
C332	87-010-384-080		CAP, ELECT 100-25V
C333	87-A11-148-080		CAP,TC U 0.1-50 Z F
C334	87-010-404-080		CAP, ELECT 4.7-50V
C335	87-018-119-080		CAP, CER 100P-50V<HRS>
C701	87-010-381-080		CAP, ELECT 330-16V
C702	87-010-404-080		CAP, ELECT 4.7-50V
C703	87-012-286-080		CAP, U 0.01-25
C704	87-012-286-080		CAP, U 0.01-25
C705	87-A10-592-080		C-CAP,S 0.015-50 J B<HRS>
C706	87-A10-592-080		C-CAP,S 0.015-50 J B<HRS>
C709	87-012-195-080		C-CAP,U 100P-50CH
C713	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C714	87-012-286-080		CAP, U 0.01-25
C715	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT HRS>
C717	87-012-286-080		CAP, U 0.01-25
C719	87-012-286-080		CAP, U 0.01-25
C720	87-012-195-080		C-CAP,U 100P-50CH
C721	87-012-176-080		CAP 15P
C722	87-012-176-080		CAP 15P
C723	87-012-274-080		CHIP CAP,U 1000P-50B
C725	87-018-131-080		CAP, CER 1000P-50V<EXCEPT HRS>
C725	87-012-274-080		CHIP CAP,U 1000P-50B<HRS>
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-260-080		CAP, ELECT 47-25V
C729	87-012-274-080		CHIP CAP,U 1000P-50B
C731	87-012-286-080		CAP, U 0.01-25
C733	87-010-987-080		C-CAP,S 1500P-50 CH<HRS>
C733	87-012-280-080		CAP, U 3300P-50<EXCEPT HRS>
C734	87-010-987-080		C-CAP,S 1500P-50 CH<HRS>
C734	87-012-280-080		CAP, U 3300P-50<EXCEPT HRS>
C735	87-010-987-080		C-CAP,S 1500P-50 CH<HRS>
C736	87-010-987-080		C-CAP,S 1500P-50 CH<HRS>
C737	87-A10-592-080		C-CAP,S 0.015-50 J B<HRS>
C738	87-A10-592-080		C-CAP,S 0.015-50 J B<HRS>
C751	87-010-220-080		C-CAP,S 0.018-25 B<HRS>
C752	87-010-220-080		C-CAP,S 0.018-25 B<HRS>
C752	87-012-282-080		CAP, U 4700P-50<EXCEPT HRS>
C753	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT HRS>
C755	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C756	87-012-286-080		CAP, U 0.01-25
C757	87-012-188-080		C-CAP,U 47P-50 CH
C758	87-012-167-080		C-CAP,U 5P-50 CH
C761	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT HRS>
C762	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C763	87-010-829-080		CAP, U 0.047-16

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C764	87-012-337-080		C-CAP,U 56P-50 CH<HRS>
C764	87-012-271-080		CAP, U 560P-50<KS,EZS,EZL>
C765	87-012-286-080		CAP, U 0.01-25
C766	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT HRS>
C768	87-012-286-080		CAP, U 0.01-25
C769	87-010-260-080		CAP, ELECT 47-25V
C770	87-010-829-080		CAP, U 0.047-16
C771	87-010-383-080		CAP, ELECT 33-25V
C772	87-010-829-080		CAP, U 0.047-16
C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C774	87-010-263-080		CAP, ELECT 100-10V
C775	87-010-404-080		CAP, ELECT 4.7-50V
C776	87-012-286-080		CAP, U 0.01-25
C777	87-010-400-080		CAP, ELECT 0.47-50V<HRS>
C777	87-010-493-080		CAP,E 0.47-50 GAS<EXCEPT HRS>
C778	87-010-401-080		CAP, ELECT 1-50V
C779	87-010-401-080		CAP, ELECT 1-50V
C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C781	87-010-405-080		CAP, ELECT 10-50V
C782	87-010-405-080		CAP, ELECT 10-50V
C783	87-012-286-080		CAP, U 0.01-25
C784	87-012-286-080		CAP, U 0.01-25
C785	87-010-401-080		CAP, ELECT 1-50V<HRS>
C785	87-010-402-080		CAP, ELECT 2.2-50V<EXCEPT HRS>
C786	87-010-401-080		CAP, ELECT 1-50V<HRS>
C786	87-010-402-080		CAP, ELECT 2.2-50V<EXCEPT HRS>
C787	87-012-275-080		C-CAP,U 1200P-50 B<EXCEPT HRS>
C788	87-012-275-080		C-CAP,U 1200P-50 B<EXCEPT HRS>
C789	87-012-275-080		C-CAP,U 1200P-50 B
C790	87-012-275-080		C-CAP,U 1200P-50 B
C791	87-010-405-080		CAP, ELECT 10-50V
C793	87-012-273-080		C-CAP,U 820P-50 B
C794	87-010-406-080		CAP, ELECT 22-50
C795	87-010-596-080		CAP, S 0.047-16
C796	87-010-403-080		CAP, ELECT 3.3-50V
C797	87-012-276-080		CAP, CHIP SS 1500 PBK<EXCEPT HRS>
C798	87-012-276-080		CAP, CHIP SS 1500 PBK<EXCEPT HRS>
C799	87-010-829-080		CAP, U 0.047-16
C812	87-012-286-080		CAP, U 0.01-25
C814	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C820	87-010-260-080		CAP, ELECT 47-25V
C821	87-012-286-080		CAP, U 0.01-25
C822	87-012-286-080		CAP, U 0.01-25
C823	87-012-286-080		CAP, U 0.01-25
C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C830	87-010-265-080		CAP, ELECT 33-16V<EXCEPT HRS>
C940	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C942	87-012-168-080		C-CAP,U 6P-50 CH<EXCEPT HRS>
C947	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C949	87-A10-039-080		C-CAP,U 470P-50 J CH<EXCEPT HRS>
C952	87-012-286-080		CAP, U 0.01-25<EXCEPT HRS>
C958	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT HRS>
C959	87-010-831-080		C-CAP,U,0.1-16F<EXCEPT HRS>
C959	87-010-196-080		CHIP CAPACITOR,0.1-25<HRS>
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-012-170-080		C-CAP,U 8P-50 CH<HRS>
C962	87-010-401-080		CAP, ELECT 1-50V<EXCEPT HRS>
C963	87-010-196-080		CHIP CAPACITOR,0.1-25<HRS>
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F<KS,EZS,EZL>
CF801	87-008-423-010		CERAMIC FILTER, SFE10.7<EXCEPT HRS>
CF801	87-008-261-010		FILTER, SFE10.7MA5-A<HRS>
CF802	82-785-747-010		CF MS2 GHY R<EXCEPT HRS>
CF802	87-008-261-010		FILTER, SFE10.7MA5-A<HRS>
CN201	87-099-014-010		CONN,12P 6216 V
CN202	87-099-569-010		CONN,12P TUC-P12P-B1
CN301	87-099-043-010		CONN 2P EH
FFE801	A8-6ZA-19C-170		6ZA-1 YFEENC<EXCEPT HRS>
FFE801	A8-8ZA-193-070		8ZA-1 YFEUNC<HRS>
J201	87-A60-420-010		JACK,3.5 ST (MSC)
J202	87-A60-659-010		TERMINAL,SPKR 4P HSP-134V-05Z
J203	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J801	87-A60-702-010		TERMINAL,ANT 4P CJ-9036<HRS>
J801	87-033-241-010		TERMINAL,ANT AJ-2039<EXCEPT HRS>
JR11	87-012-286-080		CAP, U 0.01-25<KS,EZS,EZL>
L201	87-005-366-010		COIL, 1UH
L202	87-005-366-010		COIL, 1UH
L301	87-003-098-080		COIL,2.2UH<HRS>
L302	87-008-372-080		FILTER, EMI BL OIRNI<KS,EZS,EZL>
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A91-110-010		FLTR,PCFJZH-450 (TOK)
L781	87-005-847-080		COIL,2.2UH(CECS)<EXCEPT HRS>
L832	87-005-847-080		COIL,2.2UH(CECS)<EXCEPT HRS>
L941	87-A50-020-010		COIL,ANT LW(COI)<EXCEPT HRS>
L942	87-A50-019-010		COIL,OSC LW(COI)<EXCEPT HRS>
L981	8Z-ZA1-665-010		COIL,AM PACK 2(TOK)<EXCEPT HRS>
L981	8Z-ZA1-667-010		COIL,AM PACK 4F(TOK)<HRS>
TC942	87-A91-658-010		TRIMMER,30P 4.0X4.5 ECRL<EXCEPT HRS>
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
FR C.B			
C601	87-012-178-080		C-CAP,U 18P-50 CH
C602	87-012-182-080		C-CAP,U 27P-50 CH
C603	87-012-337-080		C-CAP,U 56P-50 CH
C604	87-012-176-080		CAP 15P
C605	87-012-186-080		C-CAP,U 39P-50 CH
C607	87-A11-148-080		CAP,TC U 0.1-50 Z F
C608	87-010-831-080		C-CAP,U,0.1-16F
C610	87-010-248-080		CAP, ELECT 220-10V
C611	87-A11-148-080		CAP,TC U 0.1-50 Z F
C612	87-010-248-080		CAP, ELECT 220-10V
C613	87-010-402-080		CAP, ELECT 2.2-50V
C614	87-A11-148-080		CAP,TC U 0.1-50 Z F
C615	87-010-400-080		CAP, ELECT 0.47-50V
C616	87-010-401-080		CAP, ELECT 1-50V
C617	87-A11-112-080		CAP,TC U 1000P-50 J CH
C618	87-010-560-040		CAP,E 10-50 GAS
C620	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C627	87-A10-826-080		C-CAP,S 1-10 K B
C628	87-010-263-080		CAP, ELECT 100-10V
C630	87-A11-148-080		CAP,TC U 0.1-50 Z F
C631	87-010-831-080		C-CAP,U,0.1-16F
C633	87-012-286-080		CAP, U 0.01-25
C634	87-012-286-080		CAP, U 0.01-25
C635	87-012-286-080		CAP, U 0.01-25
CN601	87-099-029-010		CONN,12P 6216H
CNA602	8A-CLD-623-010		CONN ASSY,2P LED
L601	87-003-171-010		COIL,15UH TROIDAL
L603	87-003-171-010		COIL,15UH TROIDAL
LCD601	8A-CLD-610-010		LCD,AIW4239ACL-13
LED609	87-A40-626-010		LED,L-934ID RED
S601	87-A91-704-080		SW,TACT EVQ 214 05R
S602	87-A91-704-080		SW,TACT EVQ 214 05R
S603	87-A91-704-080		SW,TACT EVQ 214 05R
S604	87-A91-704-080		SW,TACT EVQ 214 05R
S605	87-A91-704-080		SW,TACT EVQ 214 05R
S608	87-A91-704-080		SW,TACT EVQ 214 05R
S609	87-A91-704-080		SW,TACT EVQ 214 05R
S610	87-A91-704-080		SW,TACT EVQ 214 05R
S611	87-A91-704-080		SW,TACT EVQ 214 05R
S612	87-A91-704-080		SW,TACT EVQ 214 05R
S613	87-A91-704-080		SW,TACT EVQ 214 05R
S614	87-A91-704-080		SW,TACT EVQ 214 05R
X601	87-030-273-010		VIB,XTAL 32.768K5PPM
X602	87-030-376-080		VIB,CER CSA5.76MG200
CD C.B			
C30	87-010-260-080		CAP, ELECT 47-25V
C401	87-010-403-080		CAP, ELECT 3.3-50V

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C402	87-A11-132-080		CAP,TC U 0.01-50 K B
C403	87-010-263-080		CAP, ELECT 100-10V
C404	87-010-248-080		CAP, ELECT 220-10V
C405	87-A11-132-080		CAP,TC U 0.01-50 K B
C406	87-010-374-080		CAP, ELECT 47-10V
C407	87-018-131-080		CAP, CER 1000P-50V
C408	87-A11-136-080		CAP,TC U 0.022-50 K B
C409	87-010-248-080		CAP, ELECT 220-10V
C410	87-010-263-080		CAP, ELECT 100-10V
C412	87-010-401-080		CAP, ELECT 1-50V
C414	87-010-405-080		CAP, ELECT 10-50V
C415	87-010-831-080		C-CAP,U,0.1-16F
C416	87-010-545-080		CAP, ELECT 0.22-50V
C417	87-012-268-080		C-CAP,U 330P-50 B
C418	87-010-785-080		C-CAP,U0.015-25BK
C420	87-A11-070-080		C-CAP,U 0.033-16 K B
C422	87-012-280-080		CAP, U 3300P-50
C423	87-A10-504-080		C-CAP,U 0.047-16 K B
C425	87-012-272-080		C-CAP,U 680P-50 B
C427	87-012-195-080		C-CAP,U 100P-50CH
C429	87-012-282-080		CAP, U 4700P-50
C430	87-012-199-080		CAP 220P
C431	87-010-545-080		CAP, ELECT 0.22-50V
C432	87-010-374-080		CAP, ELECT 47-10V
C433	87-010-401-080		CAP, ELECT 1-50V
C434	87-012-280-080		CAP, U 3300P-50
C435	87-A11-132-080		CAP,TC U 0.01-50 K B
C436	87-010-374-080		CAP, ELECT 47-10V
C437	87-010-404-080		CAP, ELECT 4.7-50V
C439	87-012-274-080		CHIP CAP,U 1000P-50B
C440	87-012-162-080		C-CAP,U 1P-50 CK
C442	87-012-178-080		C-CAP,U 18P-50 CH
C443	87-012-195-080		C-CAP,U 100P-50CH
C444	87-012-195-080		C-CAP,U 100P-50CH
C445	87-010-831-080		C-CAP,U,0.1-16F
C446	87-010-831-080		C-CAP,U,0.1-16F
C447	87-010-831-080		C-CAP,U,0.1-16F
C448	87-012-182-080		C-CAP,U 27P-50 CH
C449	87-012-195-080		C-CAP,U 100P-50CH
C450	87-012-270-080		CAP, U 470P-50
C451	87-012-199-080		CAP 220P
C455	87-010-263-080		CAP, ELECT 100-10V
C456	87-012-195-080		C-CAP,U 100P-50CH
C457	87-012-176-080		CAP 15P
C458	87-012-176-080		CAP 15P
C459	87-010-263-080		CAP, ELECT 100-10V
C460	87-015-819-080		CAPACITOR,0.01
C461	87-A11-132-080		CAP,TC U 0.01-50 K B
C462	87-010-248-080		CAP, ELECT 220-10V
C463	87-A11-132-080		CAP,TC U 0.01-50 K B
C465	87-010-404-080		CAP, ELECT 4.7-50V
C466	87-010-831-080		C-CAP,U,0.1-16F
C467	87-010-263-080		CAP, ELECT 100-10V
C469	87-A11-092-080		CAP,TC U 150P-50 J CH
C470	87-010-544-080		CAP, ELECT 0.1-50V
C471	87-A11-148-080		CAP,TC U 0.1-50 Z F
C472	87-A11-148-080		CAP,TC U 0.1-50 Z F
C473	87-A11-148-080		CAP,TC U 0.1-50 Z F
C474	87-A11-148-080		CAP,TC U 0.1-50 Z F
C475	87-A11-145-080		CAP,TC U 0.01-50 Z F
C476	87-010-236-080		CAP,E 1000-10 SME
C477	87-012-286-080		CAP, U 0.01-25
C478	87-010-263-080		CAP, ELECT 100-10V
C479	87-012-286-080		CAP, U 0.01-25
C480	87-010-221-080		CAP, ELECT 470-10V
C481	87-010-405-080		CAP, ELECT 10-50V
C482	87-010-405-080		CAP, ELECT 10-50V
C489	87-A11-148-080		CAP,TC U 0.1-50 Z F
C490	87-A11-148-080		CAP,TC U 0.1-50 Z F
C491	87-A11-132-080		CAP,TC U 0.01-50 K B
C492	87-010-221-080		CAP, ELECT 470-10V
C493	87-012-286-080		CAP, U 0.01-25
C494	87-A11-132-080		CAP,TC U 0.01-50 K B
C495	87-A11-116-080		CAP,TC U 1500P
C496	87-A11-144-080		CAP,TC U 0.1-50 K B
C501	87-010-248-080		CAP, ELECT 220-10V
C507	87-010-406-080		CAP, ELECT 22-50
C508	87-010-406-080		CAP, ELECT 22-50
C509	87-010-401-080		CAP, ELECT 1-50V
C510	87-010-401-080		CAP, ELECT 1-50V
C511	87-012-274-080		CHIP CAP,U 1000P-50B
C512	87-012-274-080		CHIP CAP,U 1000P-50B
C516	87-012-276-080		CAP, CHIP SS 1500 PBK
C517	87-012-276-080		CAP, CHIP SS 1500 PBK
C521	87-010-401-080		CAP, ELECT 1-50V
C522	87-010-401-080		CAP, ELECT 1-50V
C523	87-012-274-080		CHIP CAP,U 1000P-50B
C524	87-012-274-080		CHIP CAP,U 1000P-50B
C529	87-012-274-080		CHIP CAP,U 1000P-50B
C530	87-012-274-080		CHIP CAP,U 1000P-50B
C531	87-018-205-080		CAP, CERA-SOL 0.022
C534	87-010-248-080		CAP, ELECT 220-10V
C543	87-012-286-080		CAP, U 0.01-25
C544	87-018-124-080		CAP, CER 270P-50V
C545	87-012-274-080		CHIP CAP,U 1000P-50B
C546	87-010-263-080		CAP, ELECT 100-10V
C551	87-012-282-080		CAP, U 4700P-50
C552	87-012-274-080		CHIP CAP,U 1000P-50B
C553	87-A11-145-080		CAP,TC U 0.01-50 Z F
C555	87-012-266-080		C-CAP,U 220P-50 B<KS,EZS,EZL>
C556	87-012-266-080		C-CAP,U 220P-50 B<KS,EZS,EZL>
C557	87-018-131-080		CAP, CER 1000P-50V<KS,EZS,EZL>
C558	87-018-131-080		CAP, CER 1000P-50V<KS,EZS,EZL>
C559	87-A11-145-080		CAP,TC U 0.01-50 Z F<KS,EZS,EZL>
CN203	87-099-558-010		CONN,12P TUC-P12X-B1
CN205	87-A60-109-010		CONN,2P V S2M-2W
CN401	87-A60-424-010		CONN,16P V TOC-B
CN501	87-A60-110-010		CONN,4P V S2M-4W
CN502	87-049-469-010		CONN,4P V
CNA402	8A-CLD-624-010		CONN ASSY,6P CD-ME
JW444	87-003-098-080		COIL,2.2UH
L401	87-003-102-080		COIL, 10UH
L404	87-003-152-080		COIL, 100UH
L501	87-007-342-010		COIL,OSC 85K BIAS
R540	87-029-124-010		RES,FUSE 2.2-1/4
SFR430	87-024-437-080		SFR100K,RH063EC
SW501	8Z-CD9-609-010		SW,SL 1-6-2 PS62D01
X401	8Z-CD5-633-010		VIB, CER16.93MHZ FCR16.93M2
LED C.B			
CN603	87-A60-109-010		CONN,2P V S2M-2W
LED601	87-A40-161-010		LED,L-1154SGD
LED602	87-A40-161-010		LED,L-1154SGD
LED603	87-A40-161-010		LED,L-1154SGD
LED604	87-A40-161-010		LED,L-1154SGD
LED605	87-A40-161-010		LED,L-1154SGD
LED606	87-A40-161-010		LED,L-1154SGD
PT C.B			
C903	87-A11-146-080		CAP,TC U 0.022-50 Z F
C904	87-A11-146-080		CAP,TC U 0.022-50 Z F
C905	87-A11-146-080		CAP,TC U 0.022-50 Z F
C906	87-A11-146-080		CAP,TC U 0.022-50 Z F
CNA901	8A-CLD-627-010		CONN ASSY,2P PWR
⚠F902	87-035-219-010		FUSE, 500MA'T'<HRS,HSS>
FB901	87-008-372-080		FILTER, EMI BL OIRNI<KS,EZS,EZL>
FB902	87-008-372-080		FILTER, EMI BL OIRNI<KS,EZS,EZL>
FC903	87-A90-505-080		FUSE CLAMP,TP00351-51<HRS,HSS>
FC904	87-A90-505-080		FUSE CLAMP,TP00351-51<HRS,HSS>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
⚠PR901	87-A90-091-080		PROTECTOR,2A 491
⚠SW901	87-A90-178-010		SW SL1-1-2<HRS>
⚠TM901	87-A60-317-010		TERMINAL, 1P MSC
⚠TM902	87-A60-317-010		TERMINAL, 1P MSC

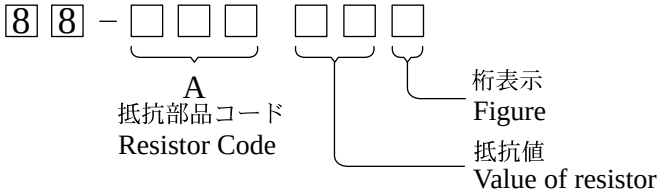
MOTOR C.B

M2	9X-262-576-910		MOTOR GEAR ASSY
PIN3	91-564-722-110		CONNECTOR 6P
SW1	91-572-085-120		LEAF SW

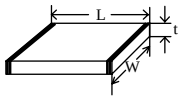
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

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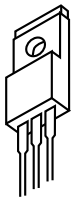
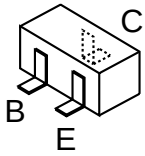
2SC1815
DTC114YS

ECB
2SA1318

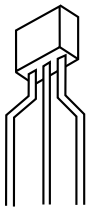
ECB
2SA933
2SC1740
DTC114TS



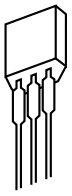
BCE
2SB1370



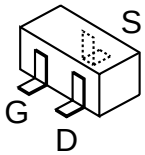
2SC2714
DTC114YK
CSD1306E
DTC114TK
RT1P141C
RT1P144C



GOUTIN
DTA124X



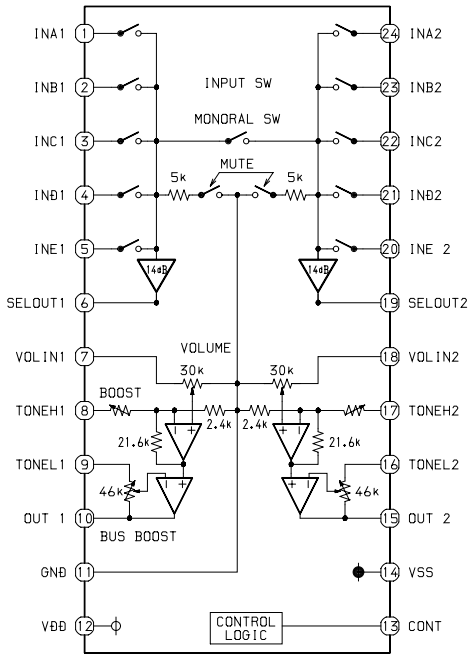
ECB
DTC124XS



2SK543

IC BLOCK DIAGRAM

IC, M62495AFP



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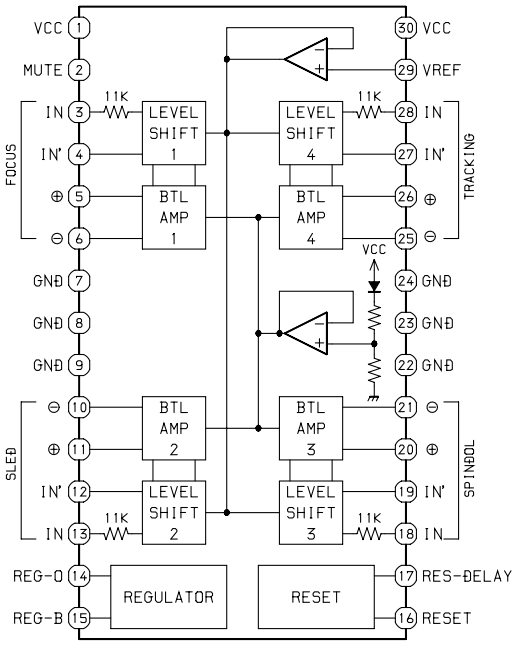

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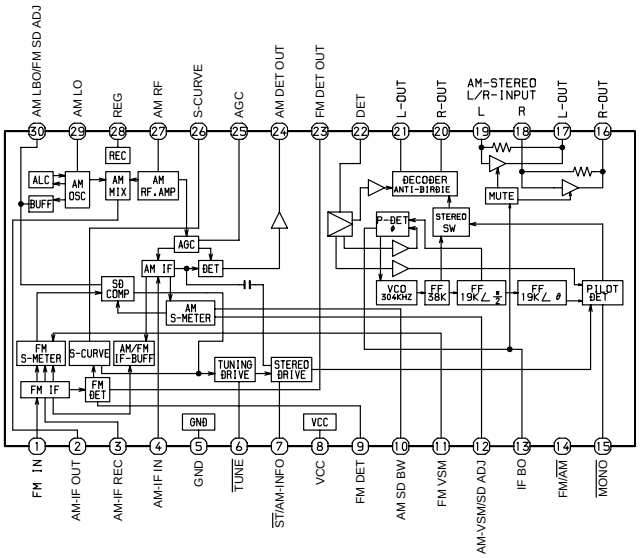

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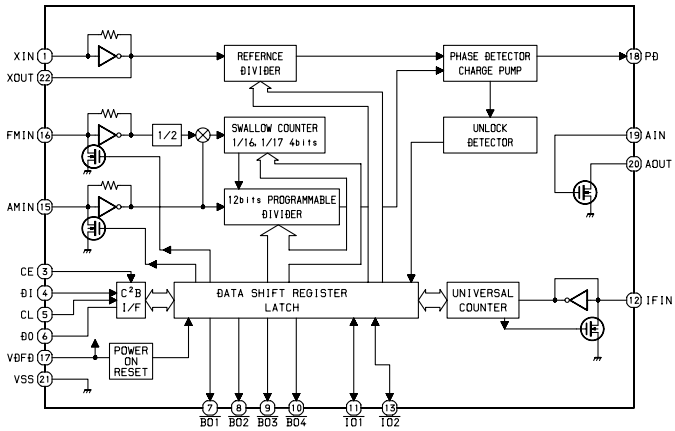

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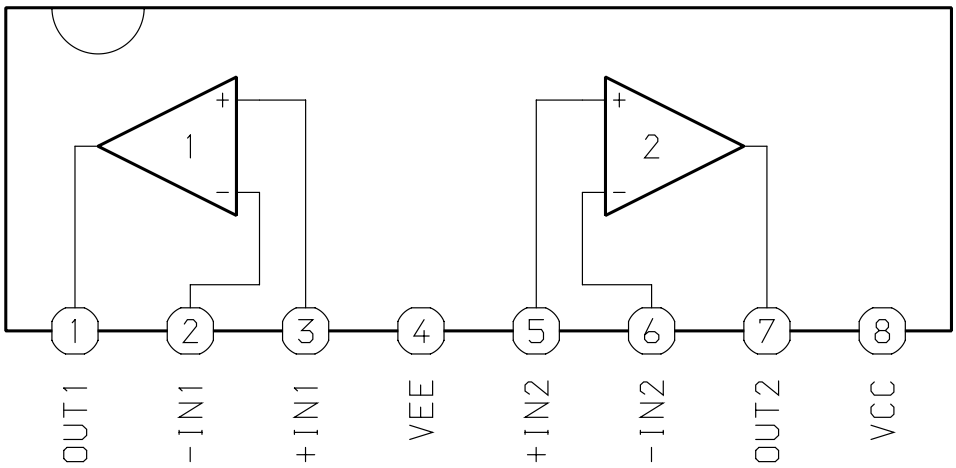

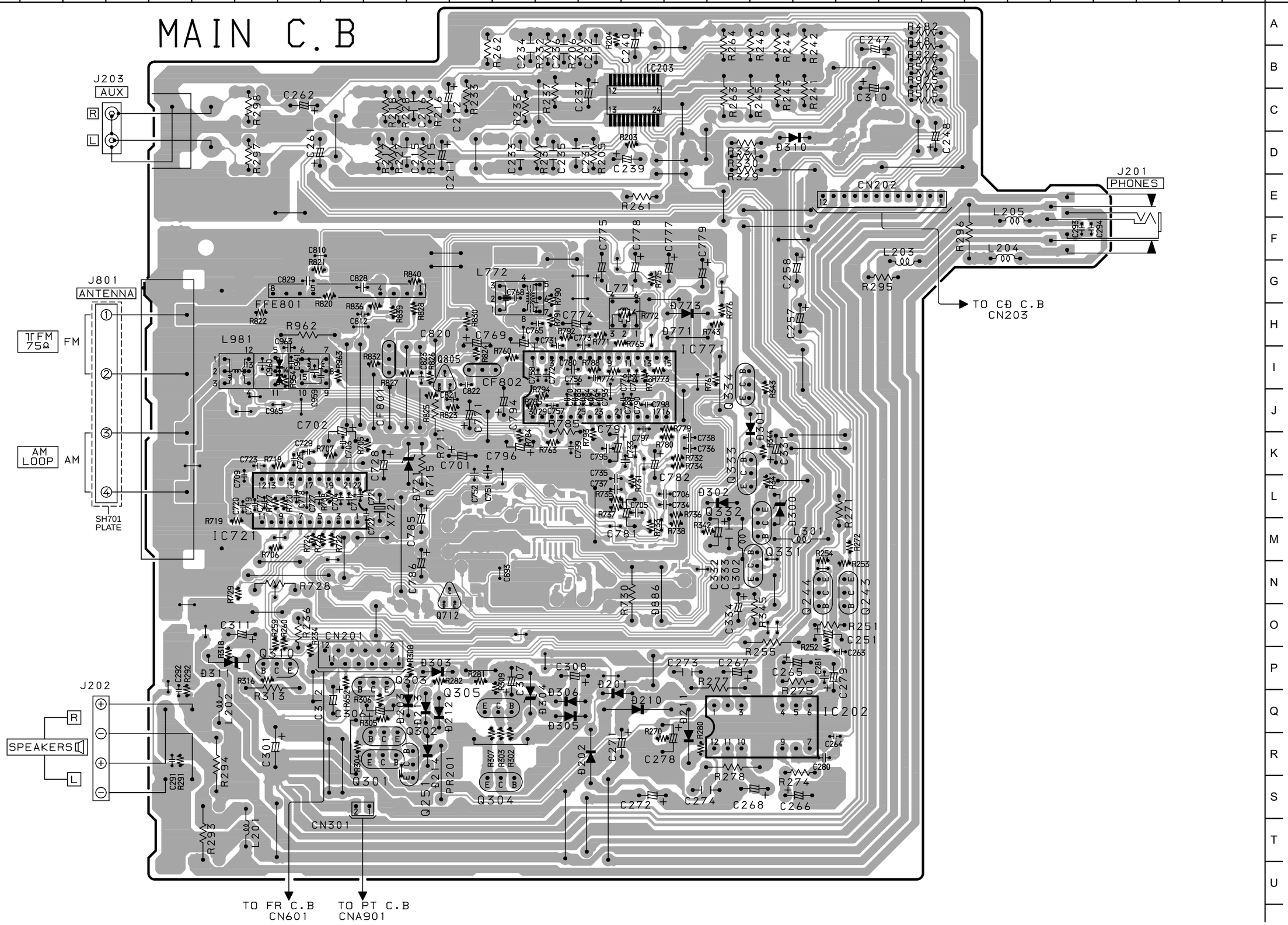
MAIN C.B
J203
AUX
R
L
J801
ANTENNA
TFM 75Ω FM
AM LOOP AM
SH701 PLATE
J202
SPEAKERS
J201
PHONES
CN202
TO CĐ C.B CN203
TO FR C.B CN601
TO PT C.B CNA901
IC203
IC771
IC202
IC721
L772
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L981
FFE801
CF801
CF802
X721
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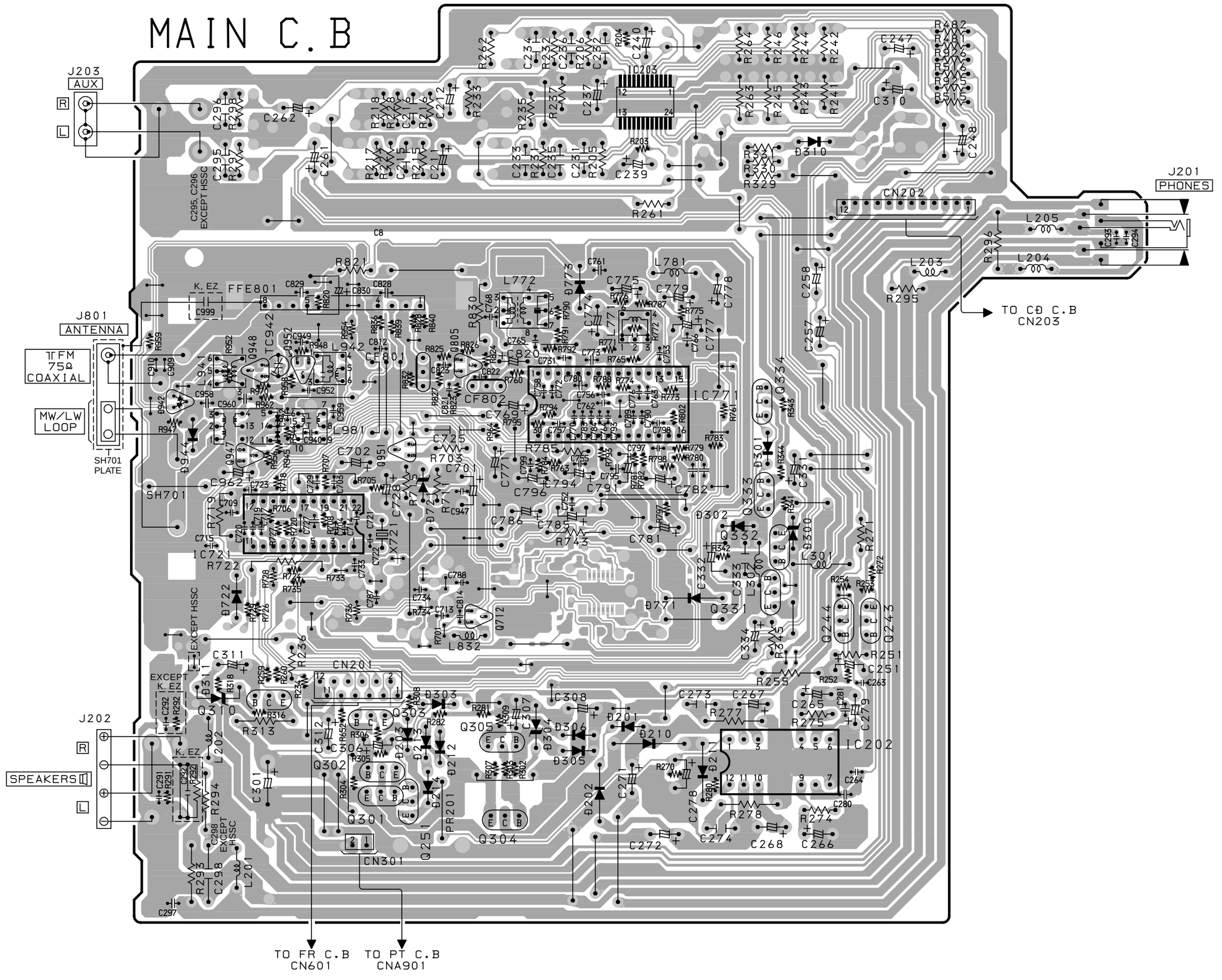
MAIN C.B
J203
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J801
ANTENNA
FM 75Ω COAXIAL
MW/LW LOOP
SH701 PLATE
J202
SPEAKERS
J201
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TO CĐ C.B CN203
TO FR C.B CN601
TO PT C.B CNA901
K, EZ
EXCEPT K, EZ
EXCEPT HSSC
C295, C296 EXCEPT HSSC
IC203
IC771
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IC721
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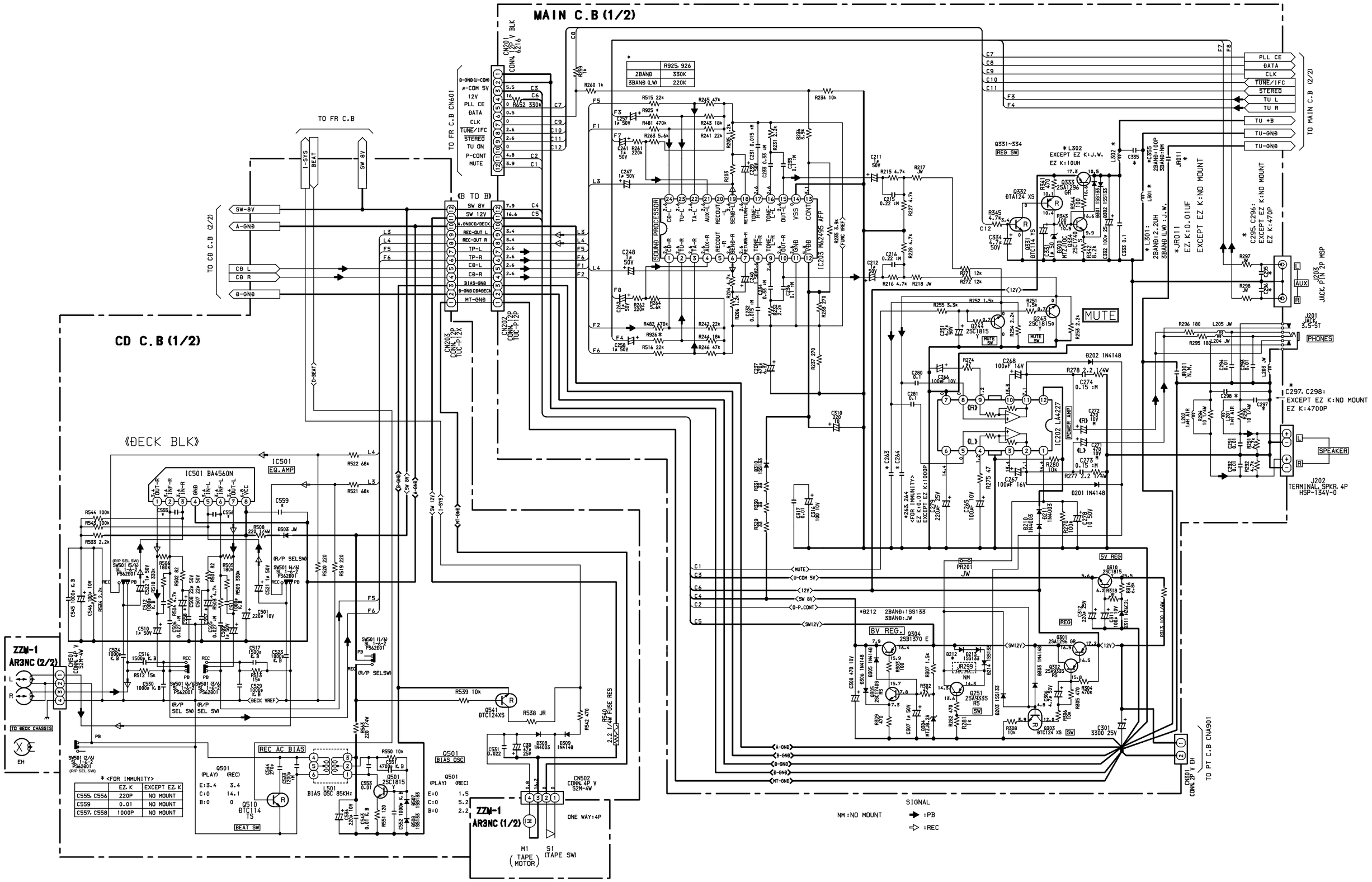
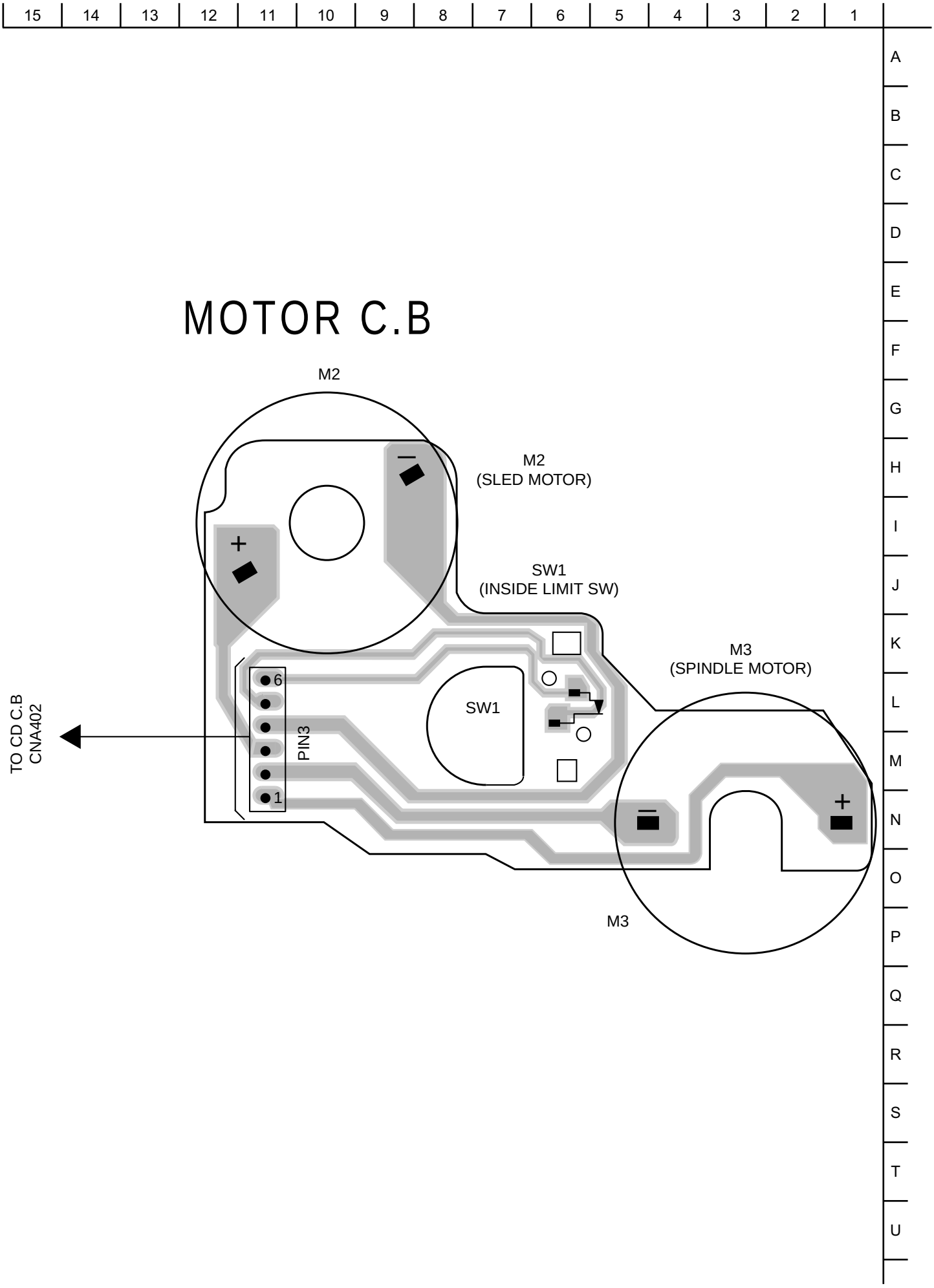
SCHEMATIC DIAGRAM-1 (MAIN)

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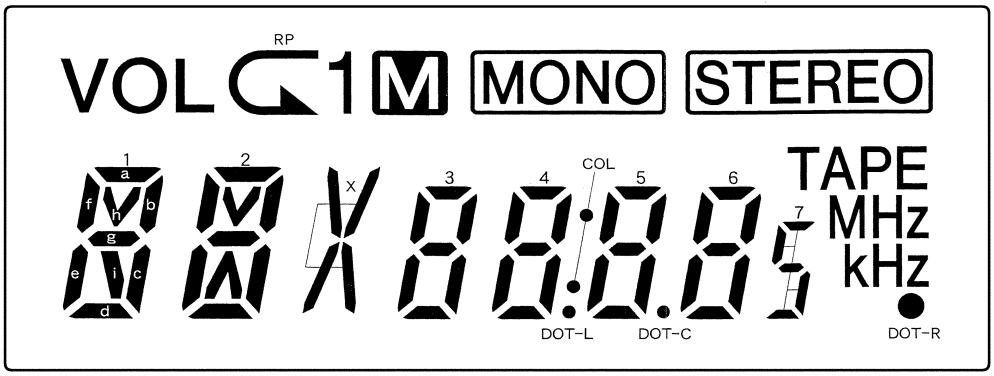
MOTOR C.B
M2
M2
(SLED MOTOR)
SW1
(INSIDE LIMIT SW)
M3
(SPINDLE MOTOR)
SW1
6
1
PIN3
TO CD C.B
CNA402
M3

FL (AIWA4239ACL-13) GRID ASSIGNMENT/ANODE CONNECTION

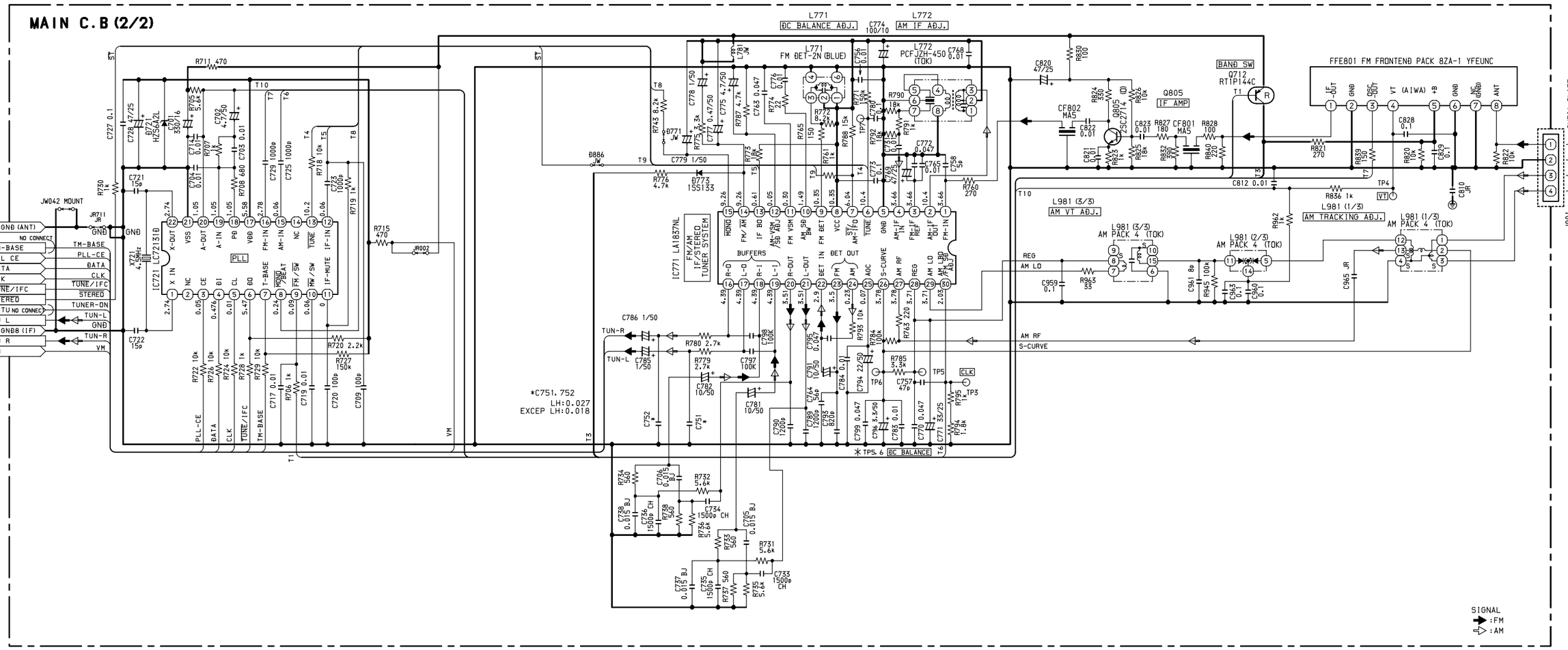
GRID ASSIGNMENT



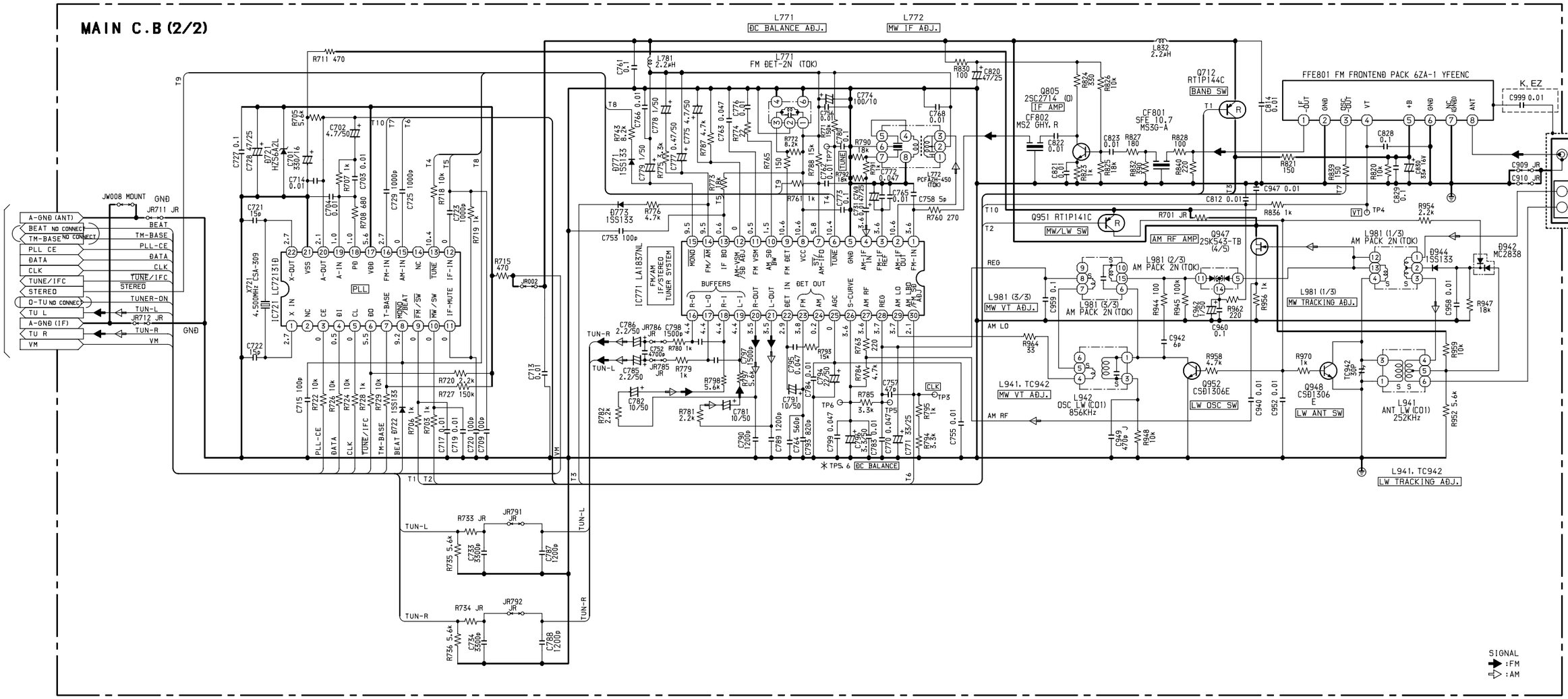
ANODE CONNECTION

NO	COM1	COM2	COM3
1	2b	2c	2d
2	1b	1c	1d
3	1a	1f	1e
4	1h	1g	1i
5	—	—	VOL
6	2a	2f	2e
7	2h	2g	2i
8	3f	3e	RP
9	3a	3g	3d
10	3b	3c	1
11	4f	4e	M
12	4a	4g	4d
13	4b	4c	X
14	col	DOT-L	MONO
15	5f	5e	DOT-R
16	5a	5g	5d
17	5b	5c	DOT-C
18	6f	6e	STEREO
19	6a	6g	6d
20	6b	6c	7
21	TAPE	MHz	KHz
22	COM1	—	—
23	—	COM2	—
24	—	—	COM3

SCHEMATIC DIAGRAM-2 (TUNER: HR)



SCHEMATIC DIAGRAM-3 (TUNER: K, EZ)



CD C.B

FR C.B

CD DOOR SW

OPTICAL PICK UP ĐA11T3C

TO MOTOR C.B PIN3

TO MAIN C.B CN202

TO MAIN C.B CN201

TAPE ĐECK (2ZM-1 AR3NC)

S1 (TAPE SW)

M1 (DECK MOTOR)

RPH

R L EH

LCĐ601 (LCD DISPLAY)

S613 VOLUME

S614 VOLUME

S608 3-MODE EQ

S603

S605 PRESET

S601 REPEAT/SLEEP FM MODE/OSC

S604

S602 MEMORY

LEĐ609 STANĐBY

S611 AUX

S609 CĐ

S610 TUNER /BANĐ

S612 POWER STANĐBY /TAPE

LED C.B

LEĐ606 LEĐ605 LEĐ604 LEĐ603 LEĐ602 LEĐ601

SCHEMATIC DIAGRAM-4 (FRONT)

FR C.B

LCÐ601 AIWA4239ACL-13
(ÐISPLAY)

*1 ÐIOÐE MATRIX

	EZ, K HS	HR, HT HC	LH
Ð621:SW1	X	X	X
Ð622:LW	O	X	X
Ð623:MW10K	X	X	O
Ð624:FM WIÐE	X	X	X
Ð625:DIRT	X	X	X
(Ð626:SW2)	X	X	X
Ð627:ZCH	O	O	O
Ð628:AM ST	X	X	X

O:1SS133
X:NO MOUNT

IC601
LC867132V-5S27
SYSTEM CONTOROL

IC602 RPM6938 V11

LED C.B

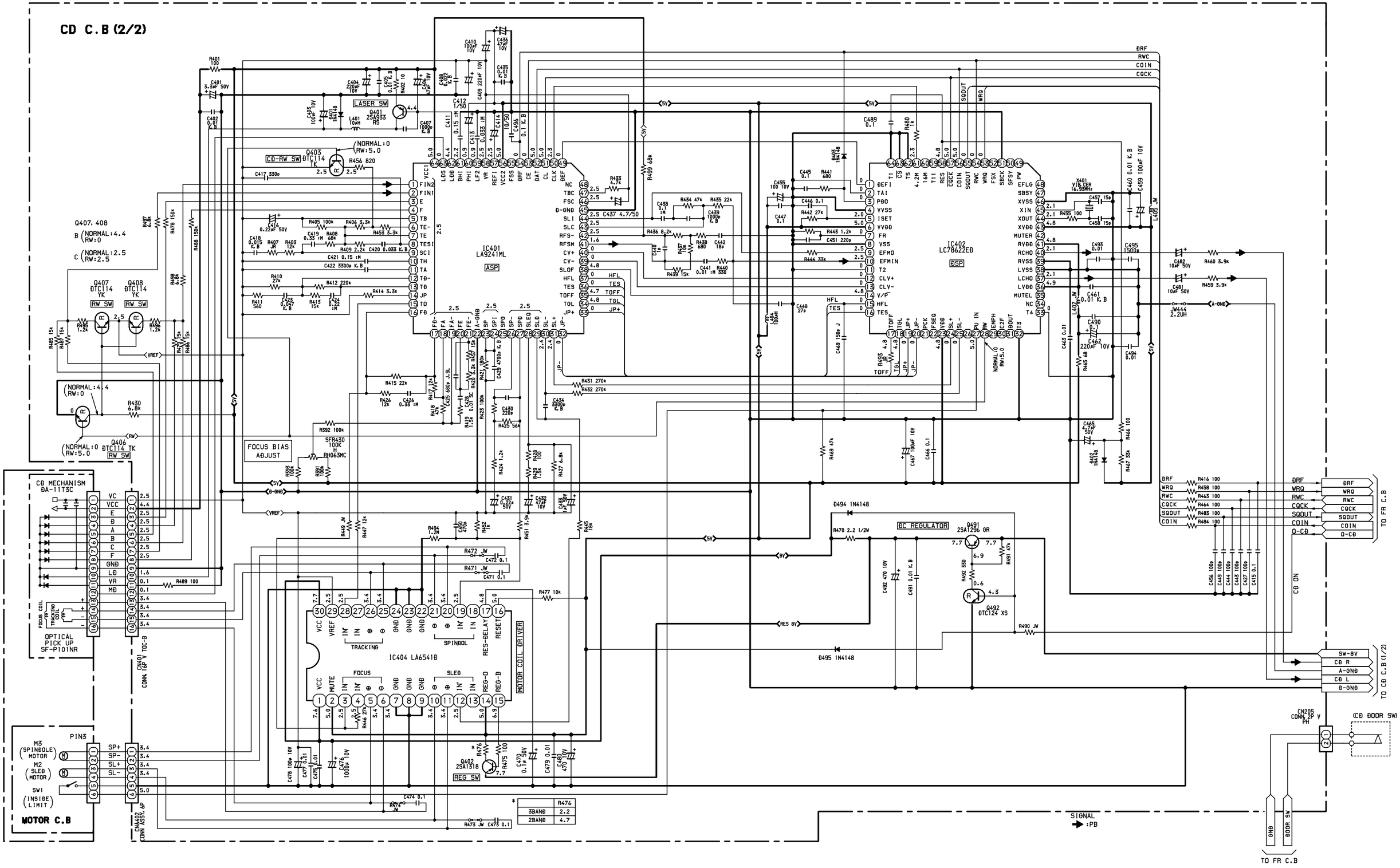
(LCÐ BACK LIGHT)

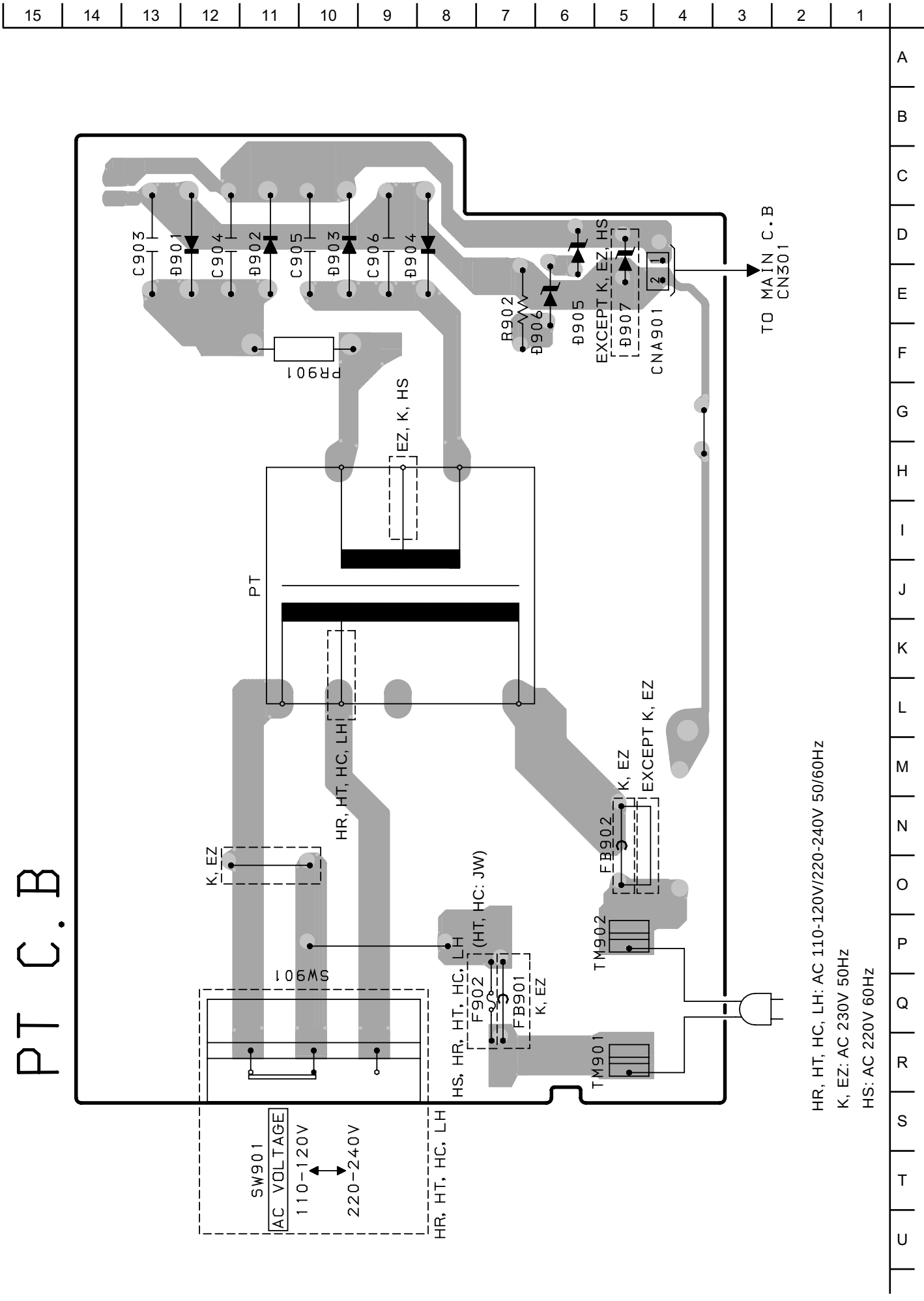
S601-S608, S614 SW, TACT EVQ 214 05R

TO CÐ C.B (1/2) TO CÐ C.B (2/2)

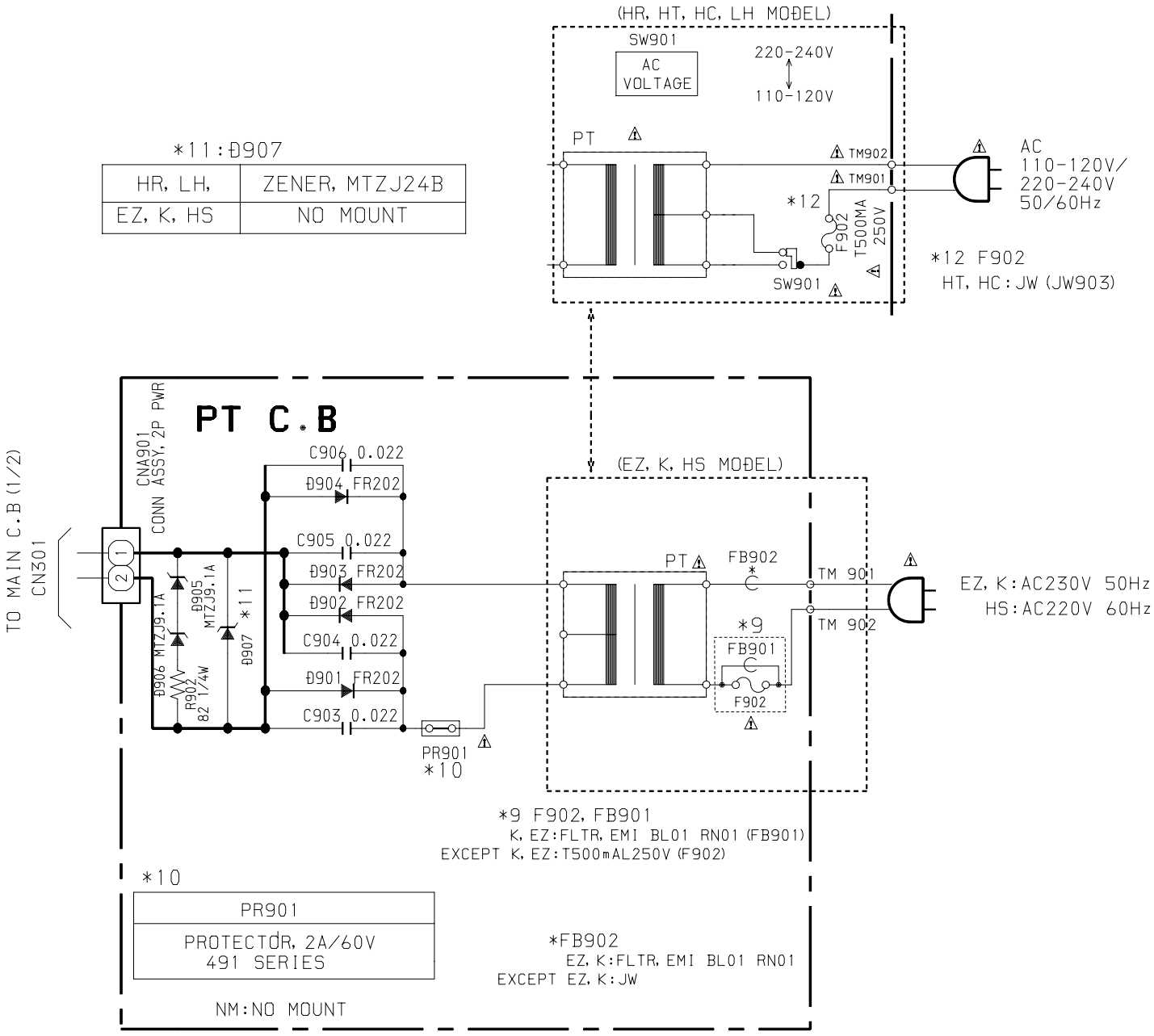
TO MAIN C.B (1/2) CN201

SCHEMATIC DIAGRAM-5 (CD)

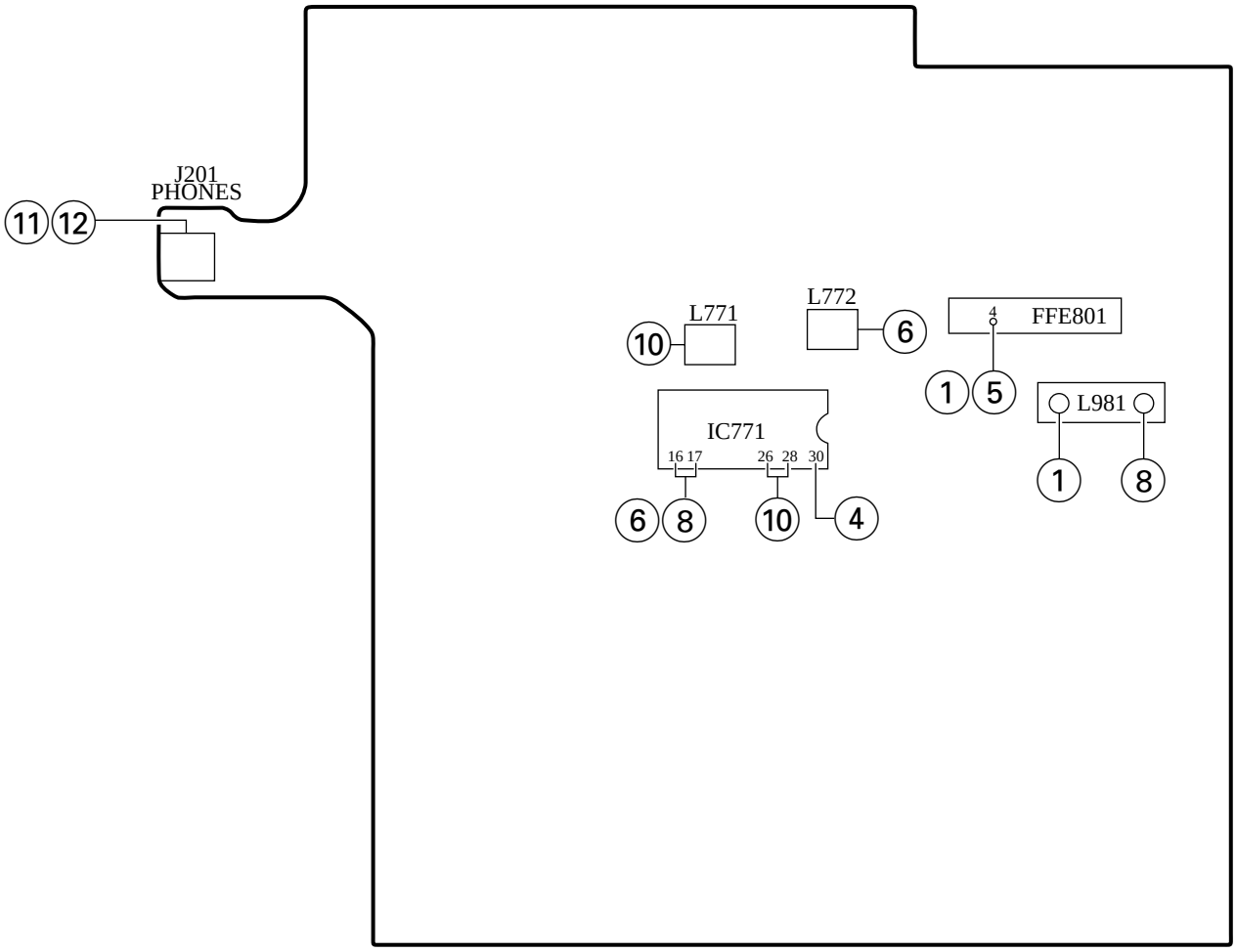



15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
PT C.B
C903
D901
C904
D902
C905
D903
C906
D904
R902
D906
D905
EXCEPT K, EZ, HS
D907
CNA901
TO MAIN C.B
CN301
PR901
EZ, K, HS
PT
HR, HT, HC, LH
K, EZ
EXCEPT K, EZ
FB902
TM902
SW901
(HT, HC: JW)
HS, HR, HT, HC, LH
F902
FB901
K, EZ
TM901
SW901
AC VOLTAGE
110-120V
220-240V
HR, HT, HC, LH
HR, HT, HC, LH: AC 110-120V/220-240V 50/60Hz
K, EZ: AC 230V 50Hz
HS: AC 220V 60Hz

SCHEMATIC DIAGRAM-6 (POWER)

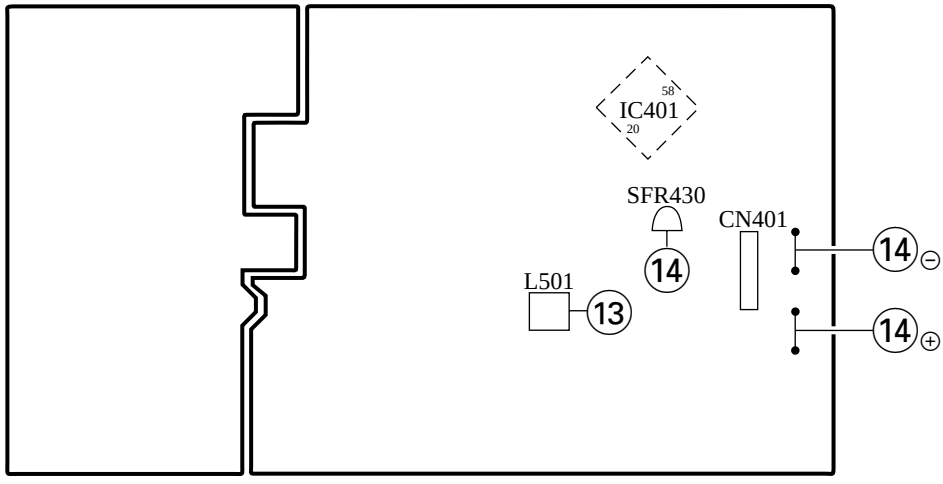


MAIN C.B (Component side)

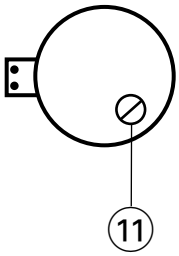


FR C.B

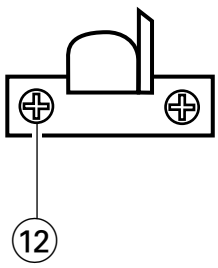
CD C.B (Component side)



M1 (TAPE MOTOR)

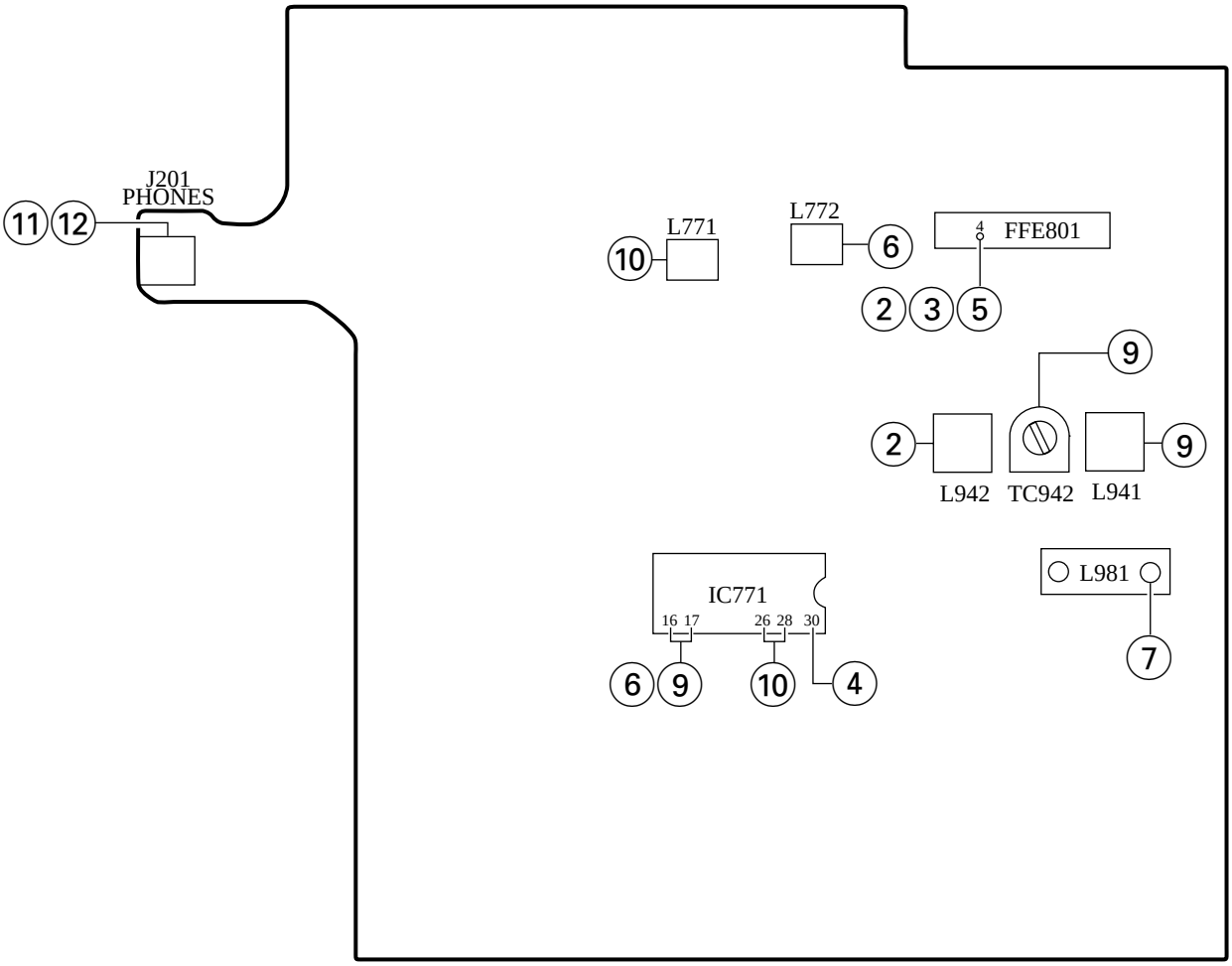


RPH



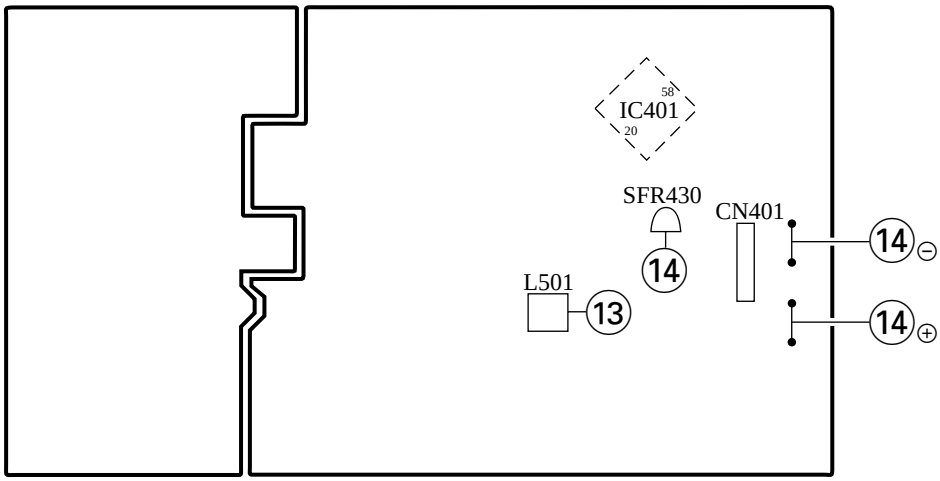
<K, EZ, HS>

MAIN C.B (Component side)

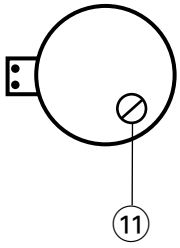


FR C.B

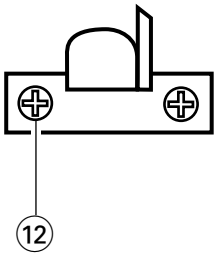
CD C.B (Component side)



M1 (TAPE MOTOR)



RPH



< TUNER SECTION >

1. AM/MW VT Adjustment <HR>
   Test point: FFE801 (4PIN)
   Adjustment location: L981 (3/3)
   7.5V±0.05V 1710kHz
   0.3V (CHECK) 530kHz

2. LW VT Adjustment <K, EZ, HS>
   Test point: FFE801 (4PIN)
   Adjustment location: L942
   1.3V±0.05V 144kHz
   8.0V (CHECK) 290kHz

3. MW VT Check <K, EZ, HS>
   Test point: FFE801 (4PIN)
   8.0V 1602kHz
   0.6V 531kHz

4. Clock Frequency Check
   Settings: Test point: IC771 (LA1837NL) 30PIN
   Method: Set to AM 1602kHz and check that the test point becomes 2052kHz±45Hz.

5. FM VT Check
   Test point: FFE801 (4PIN)
   8.0V 108.0MHz
   0.5V 87.5MHz

6. IF Adjustment
   Settings:
   - Test point: IC771 (LA1837NL) 16, 17PIN
   - Adjustment location: L772

   Method: Adjust L772 so that the output level at 1000kHz/999kHz becomes maximum.

7. AM/MW Tracking Adjustment <K, EZ, HS>
   L981 (1/3) 603kHz

8. AM Tracking Adjustment<HR>
   Settings:
   - Test point: IC771 (LA1837NL) 16, 17PIN
   - Adjustment location: L981 (1/3)

   Method: Adjust L981 (1/3) so that the output level at 1000kHz/999kHz becomes maximum.

9. LW Tracking Adjustment <K, EZ, HS>
   Settings:
   - Test point: IC771 (LA1837NL) 16, 17PIN
   - Adjustment location: L941, TC942

   Method: Set the TC942 to mechanical center.
   Adjust L941 so that the output level at 144kHz becomes maximum.
   Adjust TC942 so that the output level at 290kHz becomes maximum.
   Repeat above procedure 2 or 3 times.

10. DC Balance Adjustment
    Settings:
    - Test point: IC771 (LA1837NL) 26, 28PIN
    - Adjustment location: L771
    - Frequency: 98.0MHz

    Method: Set to FM 98.0MHz and adjust L771 so that the voltage between 26PIN and 28PIN becomes 0V±0.04V.

< TAPE SECTION >

11. Tape speed Adjustment
    Settings:
    - Test tape: TTA-100
    - Test point: J201 (PHONES jack)
    - Adjustment location: SFR of deck motor

    Method: Play back the test tape and adjust SFR so that the frequency counter reads 3000Hz ±30Hz.

12. Head Azimuth Adjustment
    Settings:
    - Test tape: TTA-320
    - Test point: J201 (PHONES jack)
    - Adjustment location: Azimuth adjustment screw.

    Method: Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.

13. Bias frequency Adjustment
    L501 ..... 85kHz ±0.5kHz

< CD SECTION >

14. FE Balance Adjustment
    Settings:
    - Test point: ⊖IC401, PIN58 (VR), ⊕IC401, PIN20 (FE)
    - Adjustment location: SFR430

    Method: Play back the disc and adjust SFR430 so that the test point voltage becomes 0V.

IC DESCRIPTION
IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE-	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES “Track Error Sense” comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD-	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD-	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD– and FA– pins.
19	FA-	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE-	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	SP	O	Signal ended output of the CV+and CV- pin input signal.
24	SPI	I	Spndle amp input.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP-	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL-, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP-, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS-	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode (± search/+ search) select pin. (Not connected)
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

IC, LC78622ED

Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISET	I		Pin to which external resistor adjusting the PD0 output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	T2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLK-	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP-	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data PB clock monitoring pin 4.3218 MHz when phase is locked in. (Not Connected)	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and thesync signal which is internally generated agree. (Not Connected)	
23	VDD	—	Digital system power supply pin.	
24	SL+	O	Moves the sled to outer circumference.	
25	SL-	O	Moves the sled to inner circumference.	
26	—	—	Not connected.	
27	PUIN	I	CD pickup inner switch detection.	
28	RW	O	Read, wright signal. (Not Connected)	
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H. (Not Connected)	
30	C2F	O	C2 flag output pin. (Not Connected)	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format). (Not Connected)	
32, 33	T3, T4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin. (Not Connected)
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.

Pin No.	Pin Name	I/O	Description	
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin. (Not Connected)
43	XVDD	—	Crystal oscillator power supply pin.	
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.	
45	XIN	I		
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.	
47	SBSY	O	Subcode block sync signal output pin. (Not Connected)	
48	EFLG	O	C1, C2, single and dual correction monitoring pin. (Not Connected)	
49	PW	O	Subcode P, Q, R, S, T, U and W output pin. (Not Connected)	
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby. (Not Connected)	
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)	
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator. (Not Connected)	
53	WRQ	O	Subcode Q output standby output pin.	
54	RWC	I	Read/write control input pin. Schmidt input.	
55	SQOUT	O	Subcode Q output pin.	
56	COIN	I	Command input pin from microprocessor.	
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin	
58	RES	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.	
59	T11	O	Test signal output pin. Use this pin as open (normally L output).	
60	16M	O	16.9344 MHz output pin.	
61	4.2M	O	4.2336 MHz output pin.	
62	T5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.	
64	T1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.	

IC, LC867132V-5S27

Pin No.	Pin Name	I/O	Description
1	O-RMC/CE	O	CD read/write control output and TU CE.
2	O-DATA	O	Data output to M62495FP.
3	O-CLK	O	Output CLK to tuner PLL.
4	—	—	Not Connected.
5	O-CLK SFT	O	Clock shift output of the microcomputer.
6	I-HOLD	I	Hold status detection.
7	I-RST	I	Microcomputer reset.
8	XT1 (IN)	I	Connected to 32.768KHZ crystal oscillator.
9	XT2 (OUT)	O	
10	VSS1	—	GND.
11	CF1 (IN)	I	Connected to 6MHZ Ceramic Filter.
12	CF2 (OUT)	O	
13	VDD1	—	Power supply for microcomputer (+5V).
14	I-FM ST	I	FM STEREO status input.
15	I-KEYO	I	KEY AD input.
16	I-CD SW	I	CD DOOR SW status detection input.
17	I-KEY1	I	KEY AD input.
18	I-MOTOR	I	DECK MECHA MOTOR status input.
19	P85	I	REC status input. (Not connected)
20	P86	I	FM, AM status input. (Not connected)
21	I-TU DO	I	Data input from tuner PLL.
22	O-BASS LED	O	BASS LED ON/OFF control output. (Not connected)
23	O-QS LED	O	Q-Sound LED ON/OFF control output. (Not connected)
24	—	—	Not connected.
25	O-INT	O	INT DIODE MATRIX detection output.
26	I-DRF	I	CD RF level detection input.
27	I-WRQ	I	CD sub-code Q standby input.
28	I-REMO	I	Remote control input.
29	S0-PA0	O	LCD segment output. (SW)
30	S1/PA1	O	LCD segment output. (LW)
31	S2/PA2	O	LCD segment output. (MW 10K)
32	S3/PA3	O	LCD segment output. (FM WIDE)
33	S4/PA4	O	LCD segment output. (OIRT)
34	S5/PA5	O	LCD segment output. (SW2)
35	S6/PA6	O	LCD segment output. (ZCH)
36	S7/PA7	O	LCD segment output. (AM ST)
37-40	S8~S11	O	LCD segment output.
41	VDD3	—	Power supply for microcomputer (+5V).
42	VSS3	—	GND.
43-51	S12~S13, S16-S22	O	LCD segment output.
52-54	S23-S25	O	LCD segment output. (Not connected)

Pin No.	Pin Name	I/O	Description
55	O-CD LED	O	LED ON/OFF control output for CD functions. (Not connected)
56	O-TU LED	O	LED ON/OFF control output for TU functions. (Not connected)
57	O-TA LED	O	LED ON/OFF control output for TAPE functions. (Not Connected)
58	O-ROCK LED	O	LED ON/OFF control output for ROCK. (Not connected)
59	O-POP LED	O	LED ON/OFF control output for POP. (Not connected)
60	O-JAZZ LED	O	LED ON/OFF control output for JAZZ. (Not connected)
61	—	—	Not connected.
62	I-CD TEST	I	
63	I-TU TEST	I	
64-66	COM0-COM2	O	LCD common output.
67	—	—	Not connected.
68	VSS2	—	GND.
69	VDD2	—	Power supply for microcomputer (+5V).
70	O-CD ON	O	CD PWR control output.
71	O-TU ON	O	TU PWR control output.
72	O-P.CONT	O	Power supply control output.
73	—	—	Not connected.
74	O-MUTE	O	Main mute output.
75	O-FM MONO	O	FM mono/stereo output.
76	O-BEAT CONT	O	BEAT switch over output.
77	O-QSOUND	O	Q-Sound ON/OFF output.
78	O-COIN	O	CD command output.
79	I-SQOUT	I	CD sub-code Q input.
80	O-CQCK	O	CLK for CD commands/sub-codes.

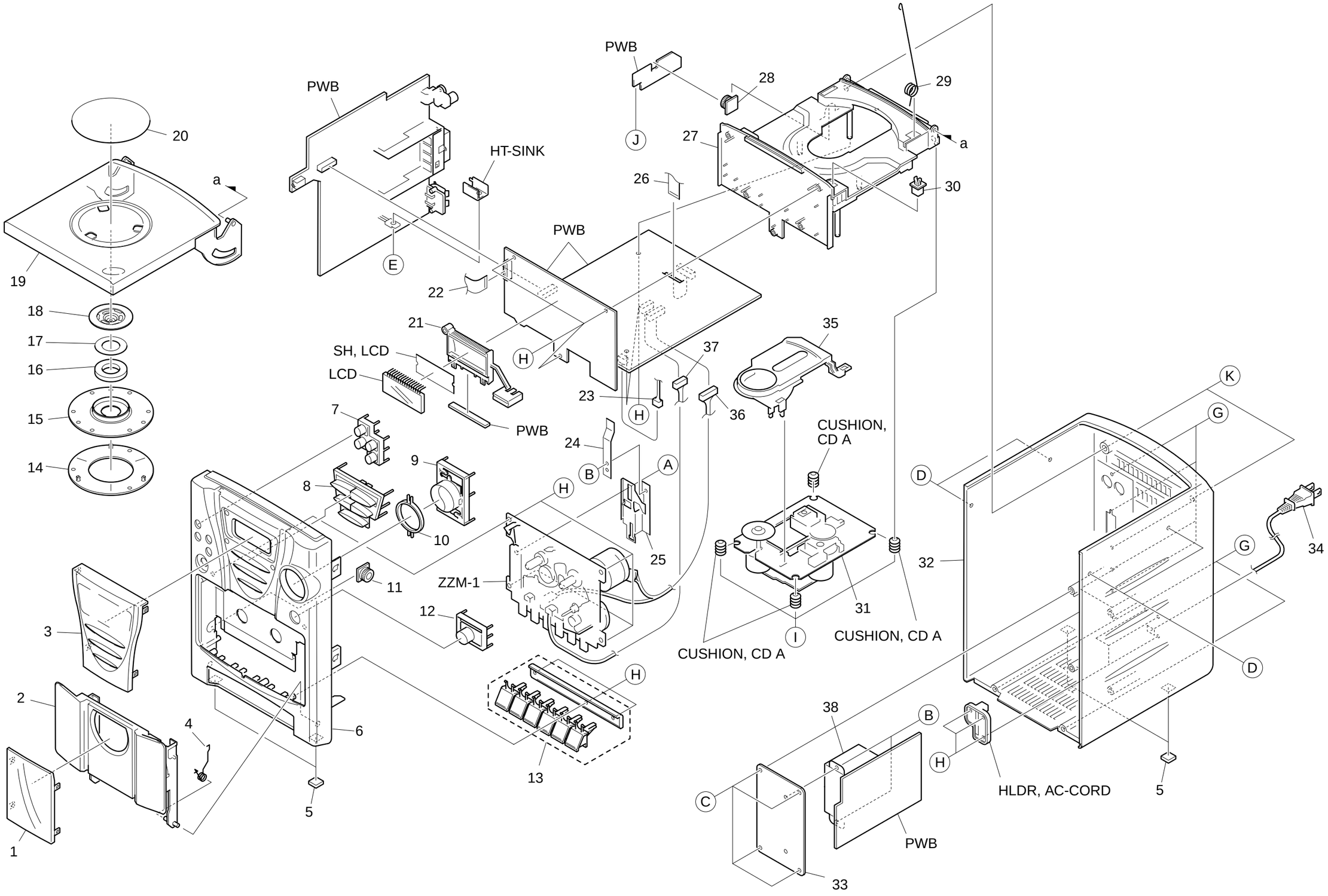
MECHANICAL PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CLD-096-010		WINDOW,CASS-E<EZL>
1	8A-CLD-007-010		WINDOW,CASS<EXCEPT EZL>
2	8A-CLD-006-010		BOX,CASS
3	8A-CLD-008-010		WINDOW,LCD<EXCEPT EZL>
3	8A-CLD-097-010		WINDOW,LCD-E<EZL>
4	8A-CLD-213-010		SPR-T,CASS
5	8A-CLD-216-010		CUSHION,FOOT
6	8A-CLD-001-010		CABI,FR
7	8A-CLD-011-010		BTN,FUNCTION
8	8A-CGD-010-010		BTN,CD-V<EZL>
8	8A-CLD-012-010		BTN,CD<EXCEPT EZL>
9	8A-CLD-010-010		BTN,VOL
10	8A-CLD-009-010		RING,VOL<EXCEPT EZL>
10	8A-CGD-009-010		RING,VOL-V<EZL>
11	87-063-164-010		OIL-DMPR 80
12	8A-CLD-013-010		BTN,EQ
13	8A-CLD-014-010		KEY,CASS
14	8Z-CT6-214-010		RING,CHUCK
15	8Z-CT6-213-010		BASE,CHUCK
16	87-036-368-010		MAGNET
17	86-CT9-222-010		PLATE,MAGNET
18	86-CT9-217-010		HLDR,CHUCK A(S)
19	8A-CGD-005-010		BOX,CD-V<EZL>
19	8A-CLD-004-010		BOX,CD<EXCEPT EZL>
20	8A-CLD-005-010		WINDOW,CD<EXCEPT EZL>
20	8A-CLD-095-010		WINDOW,CD-E<EZL>
21	8A-CLD-201-010		HLDR,LCD
22	8A-CLD-621-010		FF-CABLE,12P FR-MAIN
23	8A-CLD-622-010		CONN ASSY,2P DOOR
24	8A-CLD-211-010		SPR-P,REC
25	8A-CLD-210-010		PLATE,REC
26	8A-CLD-620-010		FF-CABLE,16P CD-RF
27	8A-CLD-003-011		CHAS,CD
28	87-063-165-010		OIL-DMPR 150
29	8A-CLD-212-010		SPR-T,CD
30	87-036-389-010		SW,PUSH LOCK
31	M8-ZZK-E90-070		DA11T3C
32	8A-CLD-032-010		CABI,REAR LH<HR>
32	8A-CLD-033-010		CABI,REAR EZ<EXCEPT HR>
33	8A-CLD-214-010		HLDR,PT
⚠ 34	87-A80-092-010		AC CORD ASSY,E BLK SUN FAI<EXCEPT HSS>
⚠ 34	87-A80-155-010		AC CORD ASSY,HS TS<HSS>
35	8Z-CT9-064-010		PANEL CD
36	8A-CLD-625-010		CONN ASSY,4P TA-ME
37	8A-CLD-626-010		CONN ASSY,4P RPH
⚠ 38	8A-CLD-642-010		PT,H<HR,HSS>
A	8A-CDA-222-010		S-SCREW,CASS+2.6-4
B	87-067-566-010		TAPPING SCREW, VFTT+3-6
C	87-661-097-410		TAPPING SCREW, VFT1+3-12
D	87-B10-118-010		QT2+3-12 W/O NI
E	87-741-102-410		UT2+3-20
F	87-751-094-410		VT2+3-6 W10SL0T
G	87-B10-269-010		UT2+3-12 W/O CR
H	87-741-096-410		UT2+3-10
I	8A-CK4-223-010		S-SCREW,CD
J	87-661-095-410		VFT1+3-8

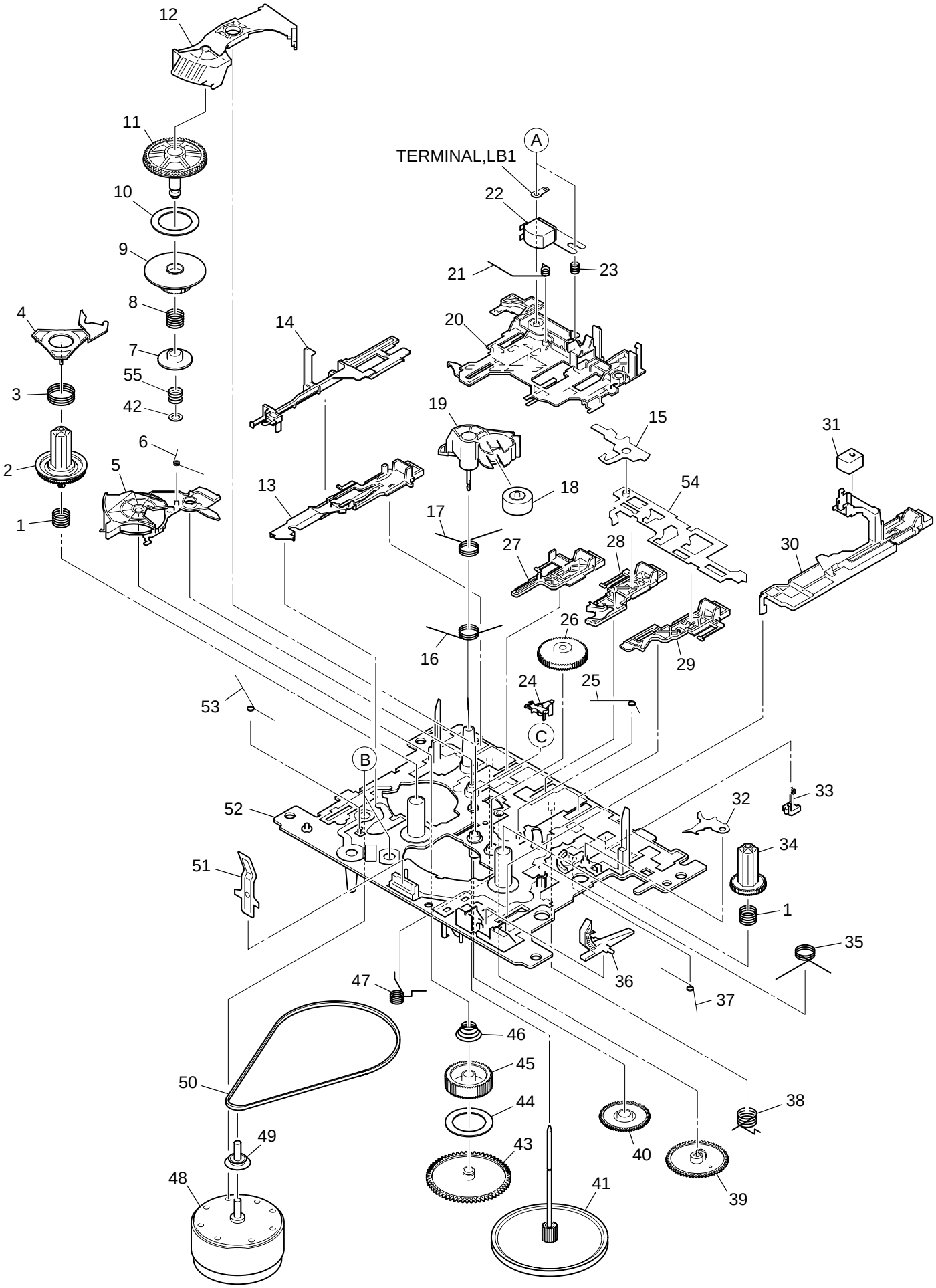
COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue				

MECHANICAL EXPLODED VIEW 1/1



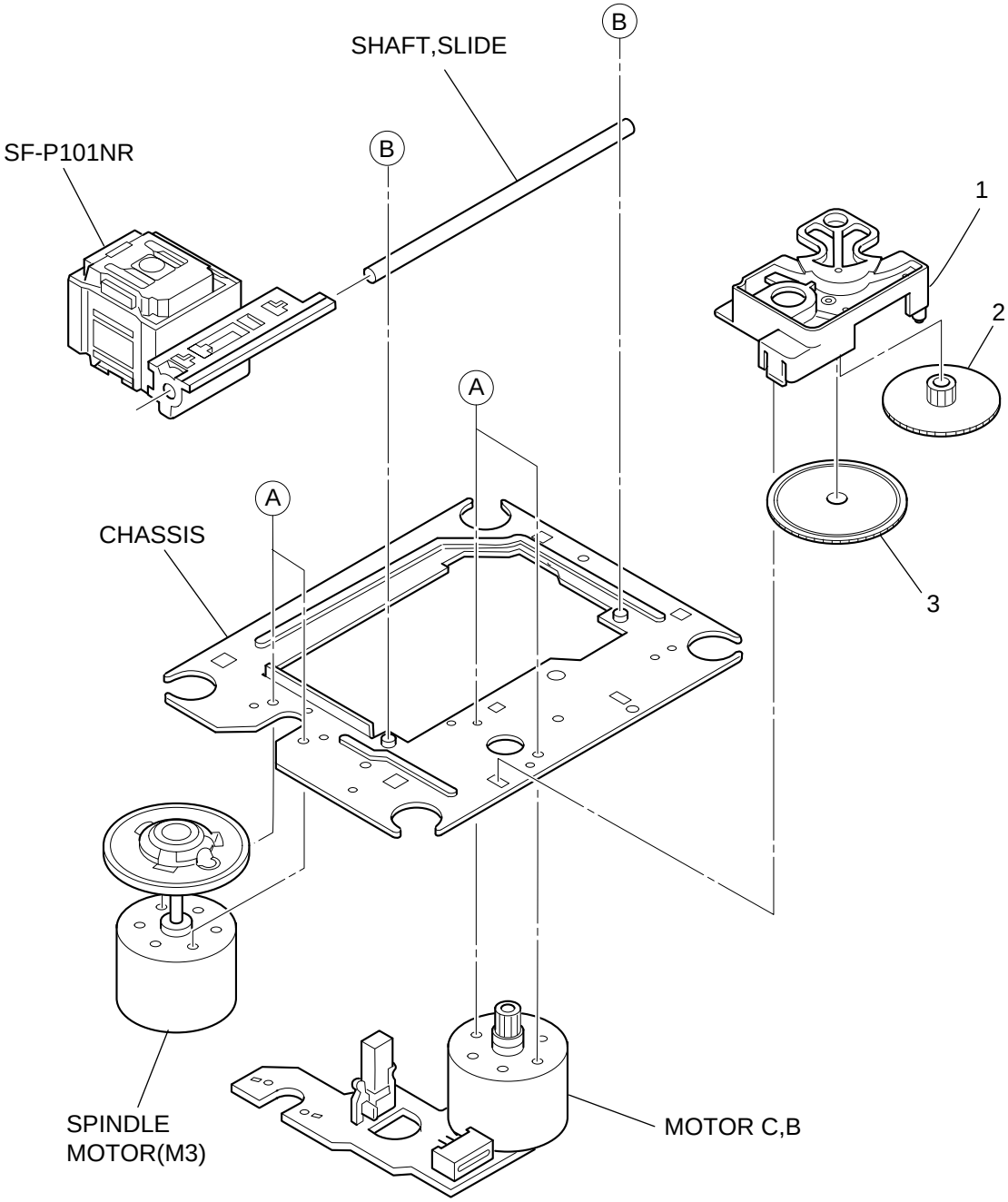
TAPE MECHANISM EXPLODED VIEW 1/1



TAPE MECHANISM PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-310		SPR-C,REEL R
2	8Z-ZM1-225-110		GEAR,REEL R
3	8Z-ZM1-253-210		SPR-C,AUTO SENSOR
4	8Z-ZM1-217-110		LEVER,AUTO SENSOR
5	8Z-ZM1-212-110		LEVER,T-UP
6	8Z-ZM1-245-310		SPR-T,AUTO
7	8Z-ZM1-236-010		CLR,SLIP FF/REW
8	8Z-ZM1-252-110		SPR-C,FF/REW
9	8Z-ZM1-230-010		GEAR,SLIP FF/REW A
10	8Z-ZM1-269-010		FELT,FF/REW 2
11	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
12	8Z-ZM1-237-110		LEVER,FF/REW 2
13	8Z-ZM1-283-010		LEVER,PAUSE 2
14	8Z-ZM1-222-010		LEVER,E-LOCK M
15	8Z-ZM1-219-010		LEVER,E-OPEN
16	8Z-ZM1-244-110		SPR-T,T-UP
17	8Z-ZM1-247-310		SPR-T,PINCH
18	8Z-ZM1-261-110		ROLLER ASSY,PINCH
19	8Z-ZM1-221-210		LEVER,PINCH
20	8Z-ZM1-205-310		LEVER,PLAY
21	8Z-ZM1-248-210		SPR-T,BRG
22	87-A91-830-010		HEAD,RP-7442
23	84-ZM2-227-310		SPR-C,AZIMUTH
24	8Z-ZM1-216-110		LEVER,AUTO
25	8Z-ZM1-246-110		SPR-T,AUTO 2
26	8Z-ZM1-233-110		GEAR,IDL REW
27	8Z-ZM1-208-010		LEVER,STOP
28	8Z-ZM1-207-010		LEVER,FF
29	8Z-ZM1-206-010		LEVER,REW
30	8Z-ZM1-211-210		LEVER,REC 2
31	87-A91-819-010		HEAD,EH 2NSS-2200
32	8Z-ZM1-215-010		LEVER,REC LOCK
33	87-A91-492-010		SW,LEAF MSW18560
34	8Z-ZM1-226-010		GEAR,REEL L
35	8Z-ZM1-241-210		SPR-T,PLAY
36	8Z-ZM1-220-110		LEVER,REC SENSOR
37	8Z-ZM1-249-210		SPR-T,FR
38	8Z-ZM1-242-310		SPR-T,FF/REW
39	8Z-ZM3-244-010		GEAR,CAM TD20
40	8Z-ZM1-232-010		GEAR,IDL FF/REW
41	82-ZM1-290-010		FLY-WHL ASSY,ZZM1
42	8Z-ZM1-275-010		W-L,1.47-4-0.25
43	8Z-ZM1-228-010		GEAR,SLIP T-UP B
44	8Z-ZM1-265-010		FELT,T-UP
45	8Z-ZM1-227-010		GEAR,SLIP T-UP A
46	8Z-ZM1-251-210		SPR-C,T-UP SLIP
47	8Z-ZM1-243-310		SPR-T,STOP/PAUSE
48	87-A91-825-010		MOT,M09Y/Z
49	8Z-ZM1-271-010		PULLEY,MOT ZZM-1
50	8Z-ZM1-264-010		BELT,MAIN S
51	8Z-ZM1-260-010		SPR-P,CASETTE
52	8Z-ZM1-201-610		CHAS ASSY,ZZM-1
53	8Z-ZM1-255-310		SPR-T,E-LOCK
54	8Z-ZM1-214-210		LEVER,LOCK
55	8Z-ZM1-257-110		SPR-C,F/R
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM1-270-110		V+2.6 ZZM-1
C	87-B10-301-010		W-L,1.63-3.2-0.5 SLIT

CD MECHANISM EXPLODED VIEW 1/1



CD MECHANISM PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S2-121-A28-400		COVER GEAR
2	S2-511-A21-000		GEAR MIDDLE
3	S2-511-A21-100		GEAR,DRIVE
A	S1-PN2-03R-OSE		SCR PAN PCS 2-3
B	87-261-073-410		SCR S-TPG FLT 2.6-6
ALL	M8-ZZK-E90-070		DA11T3C

SPEAKER PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CLD-635-010		SPKR,10MM 7OHM 8W Y000411
2	8A-CLD-025-010		FRAME,NET ASSY<EXCEPT EZL>
2	8A-CGD-012-010		FRAME,NET-V ASSY<EZL>
3	8A-CLD-021-010		CABI,SPKR-FR
4	8A-CLD-026-010		PLATE,GATE
5	8A-CLD-216-010		CUSHION,FOOT
A	87-741-096-410		UT2+3-10
B	87-741-104-410		UT2+3-30 GLD

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